Ministry of Health

Annual Report 1984/85

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Honourable James A. Nielsen
Minister of Health

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April 30, 1986

The Honourable ROBERT GORDON ROGERS
Lieutenant-Governor of the Province of British Columbia

MAY IT PLEASE YOUR HONOUR:

The Annual Report of the Ministry of Health for 1984/85 is herewith respectfully submitted.

James A. Nielsen
Minister of Health

Ministry of Health
Victoria, B.C.

April 30, 1986

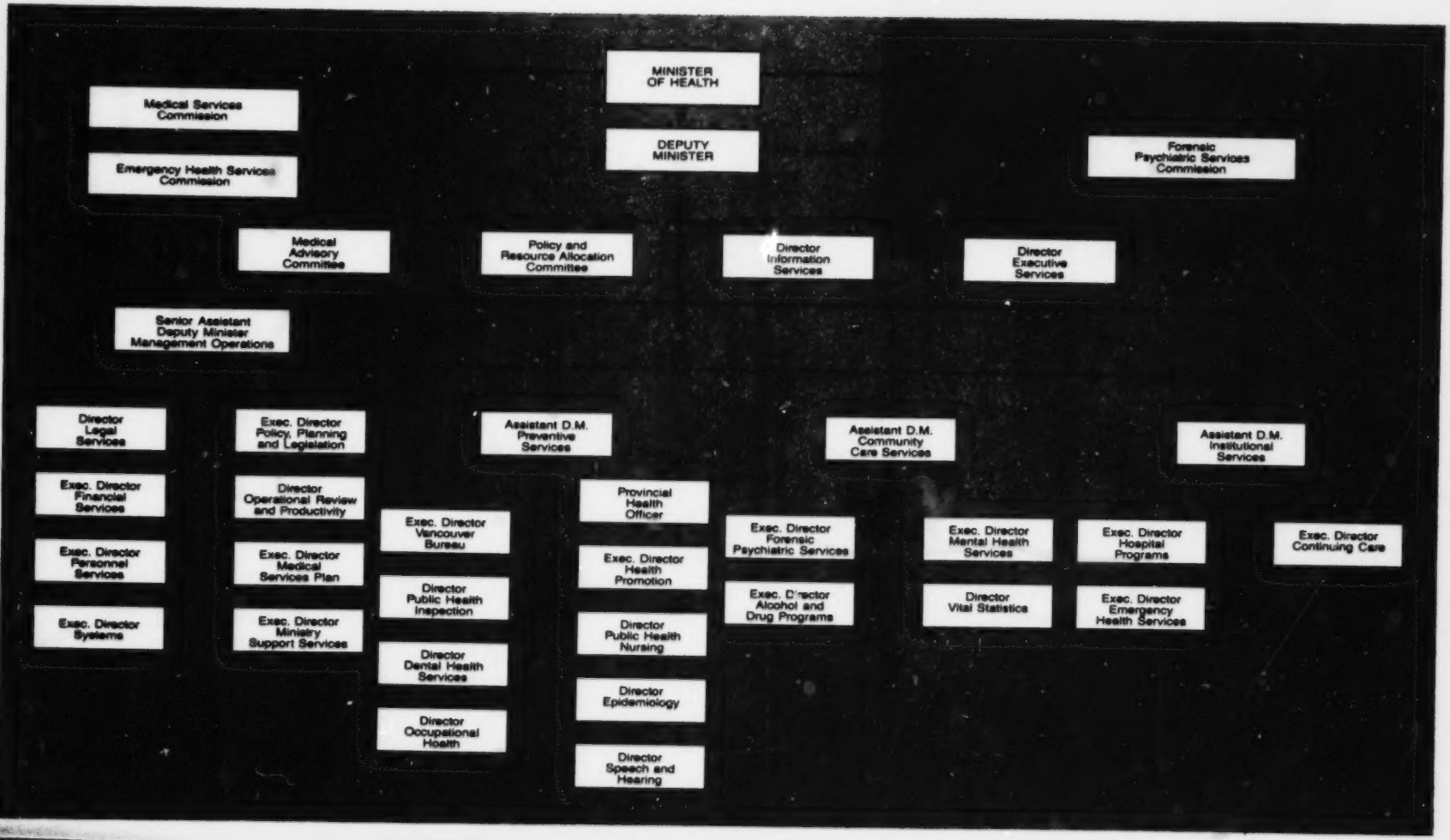
The Honourable James A. Nielsen,
Minister of Health,
Victoria, B.C.

Sir:

I have the honour to submit the Annual Report of the Ministry of Health for 1984/85.

S. P. Dubas
Deputy Minister of Health

Ministry Organization
As of March 31, 1985


MINISTER OF HEALTH
DEPUTY MINISTER
Medical Services Commission
Emergency Health Services Commission
Forensic Psychiatric Services Commission
Medical Advisory Committee
Policy and Resource Allocation Committee
Director Information Services
Director Executive Services
Senior Assistant Deputy Minister Management Operations
Director Legal Services
Exec. Director Financial Services
Exec. Director Personnel Services
Exec. Director Systems
Exec. Director Policy, Planning and Legislation
Director Operational Review and Productivity
Exec. Director Medical Services Plan
Exec. Director Ministry Support Services
Assistant D.M. Preventive Services
Exec. Director Vancouver Bureau
Director Public Health Inspection
Director Dental Health Services
Director Occupational Health
Provincial Health Officer
Exec. Director Health Promotion
Director Public Health Nursing
Director Epidemiology
Director Speech and Hearing
Assistant D.M. Community Care Services
Exec. Director Forensic Psychiatric Services
Exec. Director Alcohol and Drug Programs
Assistant D.M. Institutional Services
Exec. Director Mental Health Services
Director Vital Statistics
Exec. Director Hospital Programs
Exec. Director Emergency Health Services
Exec. Director Continuing Care

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ACTS UNDER THE JURISDICTION OF THE MINISTER OF HEALTH

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Chiropractors Act

Community Care Facility Act

Dental Technicians Act

Dentists Act

Forensic Psychiatry Act

Hairdressers Act

Health Act

Health Emergency Act

Health Science Centre (UBC) Act

Hearing Aid Act

Heroin Treatment Act

Hospital Act

Hospital (Auxiliary) Act

Hospital District Act

Hospital Insurance Act

Hospitals Amalgamation Act

Human Tissue Gift Act

Marriage Act

Medical Practitioners Act

Medical Service Act

Medical Service Plan Act, 1981

Mental Health Act

Ministry of Health Act

Name Act

Naturopaths Act

Nurses (Licensed Practical) Act

Nurses (Registered Psychiatric) Act

Nurses (Registered) Act

Optometrists Act

Pharmacists Act

Physiotherapists Act

Podiatrists Act

Psychologists Act

Public Toilet Act

Tuberculosis Institution Act

Venereal Disease Act

Vital Statistics Act

Wills Act (Part II)

Management Operations

MANAGEMENT OPERATIONS

Management Operations is responsible for providing support services to the programs of the Ministry, and for corporate management of Ministry affairs. The Medical Services Plan of British Columbia is also a responsibility of Management Operations.

Ministry Support Services

Ministry Support Services is responsible for a range of support services for all Ministry programs. The broad areas of responsibility include facilities management, logistic and building services, management engineering services, forms management, technical laboratories, materials management, and transportation. These services are provided from facilities located in Victoria and Port Coquitlam.

Services are provided to all segments of the Ministry, including health units, mental health centres, government hospitals and institutions, and a variety of health service agencies and societies. There is active participation in the British Columbia Hearing Aid Program through the provision of specialty hardware, technical expertise, and hearing aid supplies. Also included is the direct service of equipment and supplies for over 200 persons requiring renal dialysis support.

Financial Services

Financial Services is responsible for developing, implementing and operating the Ministry's financial management and control systems. This is accomplished through the operation of three branches within the division: (1) Financial Analysis, Planning and Budgets; (2) Financial Policy and Procedures; and (3) Accounting Operations.

In 1984/85, the Financial Services Division completed several major initiatives designed to enhance resource control, including the complete revision of the Chart of Accounts to better meet the needs of Ministry users and the implementation of a full-time-equivalent (FTE) reporting system to assist in the management of personnel resources.

The Division made significant progress toward completion of the Ministry's Financial Administration Policy Manual. The manual provides a reference source for all Ministry staff on financial issues, explains the Government environment and the role of Financial Services within that environment, describes the organizational structure of the Financial Services Division and provides detailed Ministry financial policy and procedures.

The introduction of a number of automated accounting systems reflected increased efficiency and staff savings. The creation of a Collections Department resulted in the recovery of substantial amounts of money owed to the Ministry which previously would have been written-off as uncollectable.

Legal Services

Legal Services provides professional legal advice to the Ministry in all areas of law, particularly health and hospital law and related medical-legal concerns.

The lawyers in the Branch are either employed by, or under contract to, the Ministry of Attorney General.

Systems Division

The purpose of the Systems Division is to promote the effective and efficient use of information technologies within the Ministry. The Division provides consulting services to program areas in the planning and implementation of systems using these technologies, within the confines of centrally-developed policies regarding technology, system integration and cost/benefit justification.

The Systems Division continued its major thrust into office automation for Ministry headquarters. In addition, health units across the province installed small office systems to support the clerical and professional staffs.

The Ministry has implemented a new base system for its finance and accounting activities, with new initiatives planned for Accounts Payable.

Re-development of the Registration and Premium Billing System in the Medical Services Plan commenced and is scheduled to be completed in the 1985/86 fiscal year.

The Systems Division completed a long-range plan which lays out its development plans, systems architecture, and organizational view for the future. In addition, a major overhaul of internal administrative systems was commenced as a result of an expanded mandate due to the changed responsibilities of the Purchasing Commission and the British Columbia Systems Corporation.

Personnel Services

This unit provides Ministry management with assistance and direction in the employment, retention and development of human resources, and represents the Ministry in negotiations to establish payment levels for fee-for-service health-care professionals

Staff Development activities increased during the year, with "Taking Charge of Your Career" training being the most visible part of the emerging Women's Programs in the Provincial Government. Supervisory and Cardio-Pulmonary Resuscitation (C.P.R.) training sessions filled immediate needs at Ministry headquarters. Joint management-staff committees were established, and the Health and Well-being committee and Safety committee have become an integral part of the Ministry's structure.

The employee data system known as "EDS" was created and expanded from headquarters to the Personnel Regional Offices. Emergency Health Services Commission personnel files were decentralized to key locations throughout the province.

During 1984/85, a comprehensive staffing audit was conducted by the Public Service Commission Audit Branch.

Operational Review and Productivity Branch

The Operational Review and Productivity Branch provides operational audit, staffing review, business case analysis, reorganization planning, performance measurement and project management services to Ministry management.

During 1984/85, the Operational Review and Productivity Branch completed the transfer of the Victoria Laundry and Pearson Hospital out of Government to non-profit society operations. The Coquitlam laundry was closed and all laundry customers were transferred to private sector contracts. A full review of Riverview and Valleyview Hospital dietary operations was completed with recommendations to update food production using cook/chill technology. An analysis of Third Party Liability recoveries was undertaken with a view to rationalizing and improving the various repayment agreements.

Policy, Planning and Legislation

The Policy, Planning and Legislation Division is responsible for health economics; health manpower and corporate planning; policy recommendations for Ministerial, inter-Ministerial and inter-Governmental decisions; co-ordination of legislation; and research and evaluation of selected Ministry programs.

The Policy Branch prepared briefing notes for the Deputy Minister and the Minister for Provincial and Federal conferences, developed Cabinet submissions, and supported the

Ministry executive with a wide range of reports and information. A number of policy and position papers were prepared throughout the year on current issues. As well, technical support and other assistance was provided to Ministerial enquiries into vision care and acupuncture.

The Legislation Branch co-ordinated the legislative program for the entire Ministry. Amendments were made to eight different acts in the *Health Statutes Amendment Act, 1985*. As well, significant preparations were made for amendments to the *Medical Service Act* and the *Vital Statistics Act*. Miscellaneous amendments were prepared, many in connection with the requirements of the *Canadian Charter of Rights and Freedoms*. Amendments to all regulations and rules under the various acts, and drafting of Orders in Council, other than for appointments to hospital boards, were co-ordinated by this Branch.

The Health Economics and Planning Branch conducted a number of economic analysis projects relating to the utilization and funding of health care. It facilitated corporate planning in the Ministry through the preparation of environmental assessments, identification of data needs and development of planning frameworks. The Branch also funded the Health Manpower Research Unit of the University of British Columbia and served on the Health Manpower Working Group, which reports to the Deputy Minister of Health and consists of representatives from the Ministries of Health, Education, Labour and Universities, Science and Communications. This group gathers and evaluates relevant data on health manpower, and facilitates appropriate manpower studies so that the Ministry of Health can co-ordinate its present and future needs with other Ministries.

The Research and Evaluation Branch provided research, statistical analysis, and evaluation services to various programs within the Ministry. Completed projects included evaluations of the James Bay Health Centre, a Tardive Dyskinesia treatment program, the Health Passport, an immunization reminder program, and a vision and development screening program. A service delivery assessment of adult day care and a review of ophthalmology services were also completed.

Significant progress was made in the evaluation of digital diagnostic imaging at the Victoria General Hospital, a seniors activation project in New Westminster, and a back-injury prevention program at Valleyview Hospital.

Information Services Branch

The Information Services Branch is responsible for developing and implementing the Ministry's public information programs.

The Branch co-ordinates media relations for the Ministry, prepares news releases, speeches and other editorial material, and co-ordinates the production of publications and audio-visual materials to promote a healthy lifestyle and to explain Ministry programs and services.

Information Services also operates the Ministry's main library and co-ordinates the Suggestion Award Program within the Ministry.

Executive Services Branch

Executive Services has two roles; one is to administer the Special Care Services Grant Program; the other is to provide support services to the Deputy Minister, Assistant Deputy Minister, Management Operations, and Senior Medical Advisor.

The Special Care Services Grant Program encompasses several areas of responsibility:

Rural Health provides planning and delivery of primary health care services to rural and isolated communities through travelling physicians, provision of nurses, and community health clinics in various areas of the province.

Services to Children oversees the operation of child development centres designed and staffed to deal specifically with the treatment of disabled children in their own communities.

Urban Health Centres provide integrated health services for special needs patients.

General Grants Program funds a wide range of community agencies to deliver a range of services in the areas of treatment, prevention, rehabilitation and education to enhance established statutory health programs.

Medical Services Plan

MEDICAL SERVICES PLAN

On July 1, 1968, British Columbia established a universal Medical Services Plan, administered and operated in accordance with the *Medical Service Act* and Regulations, under the supervision of the Medical Services Commission. The Commission is empowered to function as the public authority appointed by the Provincial Government to be responsible to the Minister of Health for the administration and operation of the Plan established under the regulations. The senior official responsible for the over-all operation of the Plan is the Executive Director.

The Medical Services Plan provides payment for all medically required services of physicians and surgeons and for specified dental surgery when necessarily performed in hospital by a dental surgeon. The Federal Government contributes to the cost of this basic coverage. The Provincial Government has, at its own expense, added various extra health benefits, including chiropractic, podiatry, optometry, physiotherapy and massage treatments, and naturopathic medicine.

The Medical Services Plan:

(a) registers all subscribers;

(b) collects premiums, either directly or through employers;

(c) provides a program of premium assistance for specified low-income earners; and

(d) provides reimbursement to qualified practitioners for insured (medically required) services rendered to eligible subscribers.

The Medical Services Plan is funded approximately 37% by premiums, with the balance from Provincial consolidated revenue and the Federal Government.

Payment for the services provided is made on a fee-for-service basis, according to a tariff of fees approved by the Commission, or on a salaried, sessional, or contract basis at levels approved by the Commission.

Premium assistance, at 50% and 90%, depending on the previous year's taxable income, is available for persons who are eligible under the *Medical Service Act*. Premium assistance was provided to approximately 19% of all persons covered by the Plan in 1984/85.

New legislation (Bill 41) was prepared to permit the Medical Services Commission to issue "practitioner numbers" to practising physicians in a manner that would improve the geographic distribution of physicians, and thus improve the availability of medical services to insured persons throughout the province. Regulations were also prepared to provide general guidelines for determining over-all medical manpower levels in different regions.

As a further initiative in addressing the difficult problem of medical manpower distribution, individual hospitals and Regional Hospital Districts were requested to establish Medical Manpower Committees whose responsibilities would include developing medical manpower plans for local areas and regional districts.

Statistical Highlights

The total expenditure for insured services under the Medical Services Plan for 1984/85 increased by $28,042,081, or 2.76%, from the prior year. Total expenditures over the past 10 years grew by 297.1%.

Payments for medical services rose by 2.22% from 1983/84 and by 304.69% from 1974/75. Payments for additional benefits increased by 8.44% from 1983/84 and by 378.43% from 1974/75.

The number of physicians claiming from the Plan increased by 2.67% from 1983/84, and the number of additional benefit practitioners rose by 5.77% from 1983/84. Over the past five years, medical practitioner growth was 15.4% (an average of 3.0% per year since 1979/80), while the British Columbia population increased by 10.0%.

On a regional basis, the average cost per capita for medical services was $313.29 in the Capital region, followed by $298.12 for Greater Vancouver. The lowest medical services cost was seen in the North region, at $174.47 per capita. The provincial average was $262.97 per capita. Other regional per capita costs were: Central Interior, $204.00; Fraser Valley, $218.69; Vancouver Island and Coast, $222.81; and Okanagan-Kootenays, $233.87.

Regional differences in medical services utilization can partly be explained by differences in age and sex distribution of the population within the region. The Capital and Greater Vancouver regions have relatively high proportions of elderly persons — 17.8% and 12.2% over 65 years of age respectively, compared with the provincial average of 11.6%.

Access to medical services will also influence utilization; the Capital region has a ratio of population to physician of 374:1 while the North region has a ratio of 901:1. The provincial average was 504:1 for 1984/85.

Note regarding interpretation of the following statistical tables: Since all tables related to claims payments for the two years (1983/84 and 1984/85) were compiled on a cash basis, the data is not truly comparable with audited year-end financial statements which are based on accrual accounting.

TABLE 1

Personnel deployment within the Medical Services Plan was distributed among the departments as follows:

Branch	Numbers	Percentage
Registration and Premium Billing	189.1	34.7
Claims Processing	176.3	32.4
Data Entry	138.4	25.4
Remaining divisions[1]	41.1	7.5
Total	544.9	100.0

[1] Includes Plan Operations/Support Services, Salaried/Sessional, Vancouver Office, Executive Director's Office.

TABLE 2

Medical Services Commission
Summary of Expenditures — 1974/75 to 1984/85[1]

Year	Medical Fee-for-Service	Salaried and Sessional	Additional Benefits	Administration	Total
	$	$	$	$	$
1974/75	190,452,494	10,424,602	11,089,892	12,501,015	224,468,003
1975/76	250,026,093	15,437,520	15,045,516	12,659,521	293,168,650
1976/77	268,496,749	14,880,410	17,090,707	13,040,063	313,507,929
1977/78	298,900,495	17,749,957	17,436,161	13,207,188	347,293,801
1978/79	337,513,465	19,484,932	21,132,210	16,856,376	394,986,983
1979/80	384,735,825	23,200,389	23,534,808	19,883,088	451,354,110
1980/81	445,734,331	28,368,006	28,567,705	21,435,615	524,105,657
1981/82	562,663,997	35,113,464	34,868,280	23,661,014	656,306,755
1982/83	671,614,777	36,376,585	44,791,468	22,086,006	774,868,836
1983/84	752,301,898	41,462,052	48,927,947	20,633,818	863,325,715
1984/85	771,013,078	41,918,756	53,057,847	25,378,115	891,367,796

[1] Based on accrual accounting and therefore matches the audited year-end financial statements.

TABLE 3

Medical Services Commission

Fee-for-service payments
Medical practitioners and dental surgery in hospital
Distribution of fee-for-service payments for medical services

Specialty	Amount Paid[1, 2]		Percentage of Total		Cost Per Person[3]	
	1983/84	1984/85	1983/84	1984/85	1983/84	1984/85
	$	$	%	%	$	$
General practice	302,912,960	306,187,681	40.77	40.12	106.746	106.526
Pathology	86,100,554	86,022,696	11.59	11.27	30.342	29.928
Radiology	56,939,339	58,699,942	7.66	7.69	20.065	20.422
Internal medicine	54,358,511	55,589,199	7.32	7.28	19.156	19.340
General surgery	38,045,624	37,471,318	5.12	4.91	13.407	13.037
Ophthalmology	30,263,233	32,432,254	4.07	4.25	10.665	11.283
Anesthesia	27,455,068	29,323,824	3.70	3.84	9.675	10.202
Obstetrics and gynecology	25,672,823	26,245,438	3.45	3.44	9.047	9.131
Psychiatry	21,499,505	22,632,281	2.89	2.97	7.576	7.874
Orthopedic surgery	19,713,760	20,441,077	2.65	2.68	6.947	7.112
Pediatrics	15,391,404	16,300,726	2.07	2.14	5.424	5.671
Urology	10,904,830	12,190,667	1.47	1.60	3.843	4.241
Ear, nose and throat	11,958,926	11,841,812	1.61	1.55	4.214	4.120
Dermatology	9,221,086	8,817,972	1.24	1.16	3.249	3.068
Neurology	6,710,346	7,104,565	.90	.93	2.365	2.472
Thoracic surgery	4,644,934	6,947,790	.63	.91	1.637	2.417
Unclassified (incl. OOP[5])	4,797,252	6,389,972	.64	.84	1.691	2.223
Plastic surgery	5,714,726	6,299,347	.77	.82	2.014	2.192
Dental surgery in hospital	3,346,718	3,942,793	.45	.52	1.179	1.372
Neurosurgery	3,762,003	3,830,018	.51	.50	1.326	1.333
Physical medicine	1,381,572	1,716,544	.19	.22	0.487	0.597
Nuclear medicine	1,126,678	1,387,602	.15	.18	0.397	0.483
Neuropsychiatry	526,103	554,163	.07	.07	0.185	0.193
Ostheopathy	324,422	344,870	.04	.05	0.114	0.120
Microbiology	146,161	306,465	.02	.04	0.052	0.107
Public health	1,215	60,924	.00	.01	0.000	0.021
Pediatric cardiology	121,092	40,690	.02	.01	0.043	0.014
Total Medical[4]:	743,040,845	763,123,630	100.00	100.00	261.846	265.499

[1] Includes all practitioners to whom any payments were made in 1984/85.

[2] Payments take into account the roll-back of the M.S.P. fee schedule between September 1, 1982, and March 31, 1983, in which the B.C. Medical Association returned 6% of radiology/pathology fees and 7% of fees for all other medical services.

[3] Based on insured population at October 1, as derived from Statistics Canada data (October 1, 1983 = 2,841,100; October 1, 1984 = 2,874,300).

[4] This detail is based on cash accounting.

[5] Out-of-Province services.

TABLE 4

Additional benefits, fee-for-service
Distribution of fee-for-service payments for insured service, additional benefits

Type of Service	Amount Paid[1]		Percentage of Total		Cost per person[2]	
	1983/84	1984/85	1983/84	1984/85	1983/84	1984/85
	$	$	%	%	$	$
Chiropractic	20,418,820	21,765,661	41.73	41.02	7.196	$7.573
Physiotherapy and Massage	13,009,072	14,427,374	26.58	27.19	4.584	5.019
Optometric	10,270,727	11,140,504	20.99	21.00	3.619	3.876
Podiatric	4,267,183	4,574,921	8.72	8.62	1.504	1.592
Naturopathic	778,762	917,648	1.59	1.73	0.274	.319
Orthodontic	191,091	190,992	.39	.36	.067	.066
Orthoptic	1,715	—	.00	—	.001	—
Unclassified	(9,423)	40,748		.08	(.003)	.014
Total Additional Benefits:[3]	48,927,947	53,057,848	100.00	100.00	17.242	18.459

[1] Includes all practitioners to whom any payments were made in 1984/85.

[2] Based on insured population at October 1, as derived from Statistics Canada data (October 1, 1983 = 2,841,100; October 1, 1984 = 2,874,300).

[3] This detail is based on cash accounting.

TABLE 5

Medical Services Commission

Distribution of medical fee-for-service payments and services by type of service

Type of Service	Number of Services		Amount Paid[1]	
	1983/84	1984/85	1983/84	1984/85
General Practitioner			$	$
Complete examination	1,364,839	1,220,500	50,713,716	46,299,866
Regional examination	9,295,423	9,578,181	157,139,018	167,510,167
Subsequent office visit	15,247	16,887	279,115	313,729
Night, Sunday, holiday or emergency visit	867,606	946,446	30,779,341	31,648,897
First house visit	162,890	153,783	5,382,246	5,162,264
Hospital visit	1,474,315	1,510,272	18,986,088	19,807,105
Subtotals:	13,180,320	13,426,069	263,279,524	270,742,038
Specialties				
Consultation	1,236,469	1,220,730	89,813,548	90,656,929
House visits	14,733	13,052	968,527	876,025
Office visits	722,634	745,236	14,827,875	15,455,477
Hospital visit	792,652	803,619	14,109,331	14,517,014
Subtotals:	2,766,488	2,782,637	119,719,281	121,505,445
Other Medical				
Anesthesia	2,542,982	2,658,013	31,311,698	32,885,780
Obstetrics	197,037	468,849	22,752,299	21,305,108
Surgery	625,382	644,666	78,909,483	84,813,804
Special procedures	1,038,410	1,071,344	32,366,976	33,829,107
X-ray	1,361,543	1,396,650	43,672,959	45,515,154
Laboratory	10,877,007	10,383,693	102,247,460	102,545,811
Common office procedures	1,439,052	1,402,415	17,438,478	17,470,181
Psychotherapy	249,331	261,500	16,538,070	17,607,580
Electrodiagnosis	158,176	177,899	13,837,547	13,797,854
Pulmonary Function	59,477	62,043	1,028,659	1,122,863
Miscellaneous	26,389	26,359	(61,589)	(17,095)
Subtotals	18,574,786	18,553,431	360,042,040	370,876,147
Total[2]	34,521,594	34,762,137	743,040,845	763,123,630

[1] Payments take into account the roll-back of the M.S.P. fee schedule between September 1, 1982, and March 31, 1983, in which the B.C. Medical Association returned 6% of radiology/pathology fees and 7% of fees for all other medical services.

[2] This detail based on cash accounting.

TABLE 6

Subscriber statistics
Registrations and persons covered by premium subsidy level[1]

Subsidy (Percentage)	At March 31, 1984		At March 31, 1985[2]	
	Subscribers	Persons	Subscribers	Persons
90%	316,360	493,529	338,014	523,018
50%	13,062	20,287	13,858	21,481
Nil	1,026,895	2,337,437	1,015,643	2,300,191
Total	1,356,317	2,851,253	1,367,515	2,844,690

[1] Coverage data does not include members of the Canadian Armed Forces, R.C.M.P. and inmates of Federal penitentiaries.

[2] Statistics reflect improvements during 1984/85 in reducing duplication in records of persons covered by the Plan.

TABLE 7

Persons covered by age group[1]

Age Groups	At March 31, 1984 Persons	At March 31, 1985[2] Persons
0–14	616,614	608,429
15–24	450,109	434,008
25–44	890,424	897,861
45–64	560,981	563,965
65+	327,342	339,772
Unknown	5,783	665
Total	2,851,253	2,844,690

[1] Coverage data does not include members of the Canadian Armed Forces, R.C.M.P. and inmates of Federal penitentiaries.

[2] Statistics reflect improvements during 1984/85 in reducing duplication in records of persons covered by the Plan.

TABLE 8A

Non-postgraduate "directory-active" male physicians in British Columbia by RCPSC[1] specialty by age[2]

Specialty	20-29	30-39	40-49	50-59	60-69	70+	Total
Anesthesia	2	57	64	61	33	8	225
General Practice	138	911	583	452	293	69	2,446
Dermatology	0	8	9	9	9	4	39
Surgery[3]	0	53	92	85	74	34	338
Internal Medicine	0	98	118	81	61	15	373
Neurology	1	14	19	7	2	4	47
Obstetrics and Gynecology	1	25	35	40	24	9	134
Ophthalmology	1	29	41	39	26	8	144
Orthopedics/Physical Medicine	0	40	45	31	22	6	144
Otolaryngology	0	14	19	18	15	3	69
Pediatrics	0	30	43	33	21	6	133
Psychiatry	4	39	69	87	47	8	254
Urology	0	15	20	17	12	1	65
Pathology/Medical Microbiology	1	18	44	36	15	5	119
Radiology/Nuclear Medicine	1	43	60	58	36	9	207
Osteopathy/Public Health/Other	1	23	20	17	10	3	74
Total	150	1,417	1,281	1,071	700	192	4,811

[1] Royal College of Physicians and Surgeons of Canada.
[2] Date of record is March, 1985.
[3] This includes General Surgery, Plastic Surgery, Thoracic Surgery and Neurosurgery.
Prepared by: The Health Manpower Research Unit, University of British Columbia.

TABLE 8B

Non-postgraduate "directory-active" female physicians in British Columbia by RCPSC[1] specialty by age[2]

Specialty	20-29	30-39	40-49	50-59	60-69	70+	Total
Anesthesia	2	13	13	10	4	0	42
General Practice	87	287	114	67	27	6	588
Dermatology	0	4	3	2	0	0	9
Surgery[3]	0	3	0	1	0	0	4
Internal Medicine	0	13	10	4	1	1	29
Neurology	0	2	1	2	1	1	7
Obstetrics and Gynecology	0	8	5	5	1	1	20
Ophthalmology	0	3	1	2	0	0	6
Orthopedics/Physical Medicine	0	1	1	0	1	0	3
Otolaryngology	0	1	1	0	0	0	2
Pediatrics	1	10	13	11	5	0	40
Psychiatry	2	21	12	9	9	0	53
Urology	0	0	0	0	0	0	0
Pathology/Medical Microbiology	0	16	9	5	2	0	32
Radiology/Nuclear Medicine	0	13	11	3	2	1	30
Osteopathy/Public Health/Other	0	0	2	1	0	1	4
Total	92	395	196	122	53	11	869

[1] Royal College of Physicians and Surgeons of Canada.
[2] Date of record is March, 1985.
[3] This includes General Surgery, Plastic Surgery, Thoracic Surgery and Neurosurgery.
Prepared by: The Health Manpower Research Unit, University of British Columbia.

TABLE 9

Non-postgraduate "directory-active" physicians in British Columbia by RCPSC[1] specialty by place of graduation[2, 3]

Specialty	B.C.	Other Canada	U.K.	U.S.A.	Other	Total
Anesthesia	55	116	63	1	32	267
General Practice	780	1,355	515	50	334	3,034
Dermatology	8	27	8	1	4	48
Surgery[4]	39	196	55	7	45	342
Internal Medicine	49	212	60	17	64	402
Neurology	11	20	10	2	11	54
Obstetrics and Gynecology	19	64	39	2	30	154
Ophthalmology	14	91	23	1	21	150
Orthopedics/Physical Medicine	17	71	30	2	27	147
Otolaryngology	9	32	12	0	18	71
Pediatrics	11	60	42	8	52	173
Psychiatry	30	127	58	9	83	307
Urology	12	36	8	1	8	65
Pathology/ Medical Microbiology	24	69	28	4	26	151
Radiology/Nuclear Medicine	28	126	43	1	39	237
Osteopathy/Public Health/Other	8	37	22	3	8	78
Total	1,114	2,639	1,016	109	802	5,680

[1] Royal College of Physicians and Surgeons of Canada.
[2] Initial medical degree.
[3] Date of record is March, 1985.
[4] This includes General Surgery, Plastic Surgery, Thoracic Surgery and Neurosurgery.
Prepared by: The Health Manpower Research Unit, University of British Columbia.

TABLE 10

Medical services utilization in British Columbia by age of patient, by sex of patient—1984/85

Age Group	Number of medical services per capita			Cost per capita		
	Males	Females	Total	Males	Females	Total[1]
				$	$	$
0– 9	8.64	7.83	8.25	190.55	165.41	178.31
10–19	5.56	7.67	6.59	123.03	158.11	140.15
20–29	6.06	16.36	11.25	135.22	345.88	241.32
30–39	7.28	14.70	10.96	163.75	331.55	247.14
40–49	8.78	13.49	11.07	196.25	299.86	246.80
50–59	12.52	14.96	13.73	281.25	322.91	301.86
60–69	18.52	17.86	18.17	417.22	382.68	398.64
70+	28.85	24.06	26.10	635.85	508.69	562.90
All Ages	9.99	14.06	12.04	222.69	302.68	262.97

[1] Dental Surgery in Hospital and payments for Out-of-Province services not included.
Prepared by: The Health Manpower Research Unit, University of British Columbia.

TABLE 11

Medical services cost per capita in British Columbia by specialty by patient sex—1984/85

Specialty	Males	Females
	$	$
Anesthesia	9.57	11.34
General Practice	88.04	128.82
Dermatology	2.73	3.41
General Surgery	17.93	17.47
Internal Medicine	19.81	17.99
Neurology	2.17	2.53
Obstetrics and Gynecology	0.21	17.94
Ophthalmology	9.87	12.67
Orthopedic Surgery	7.70	7.50
Otolaryngology	4.56	3.91
Pediatrics	5.24	4.18
Psychiatry	6.32	9.90
Urology	6.23	2.25
Pathology and Bacteriology	24.88	37.93
Radiology	17.35	24.64
Other	0.10	0.18

Prepared by: The Health Manpower Research Unit, University of British Columbia.

TABLE 12

Population per physician by region, British Columbia, Canada

Region[1]	Physicians[2]	Population[3]	Ratio
North	290	261,316	901:1
Lower Mainland (Fraser Valley)	363	288,056	794:1
Central Interior	286	211,875	741:1
Vancouver Island and Coast	398	276,928	696:1
Okanagan-Kootenays	541	350,002	647:1
Greater Vancouver (GVRD)	3,107	1,216,352	392:1
Capital (CRD)	691	258,212	374:1
British Columbia	5,676[4]	2,862,741[5]	504:1
Canada	42,400[6]	25,262,500[7]	596:1

[1] Seven macro-regions were constructed by aggregation of coterminus Regional Hospital Districts.
[2] Non-postgraduate Directory Active Physicians at September, 1984.
[3] Population estimates derived from Central Statistics Bureau projection at June 1, 1984 = 2,862,741.
[4] Derived from data supplied by the Health Manpower Research Unit, University of British Columbia.
[5] Figures do not add up to total because of rounding.
[6] Source of Data: Southam Communications Limited, Don Mills, Ontario.
[7] Health Information Division, Department of National Health and Welfare.
Prepared by: The Health Manpower Research Unit, University of British Columbia.

FIGURE 1 — MSP Expenditures and Inflation Index (1974/75 = 100)

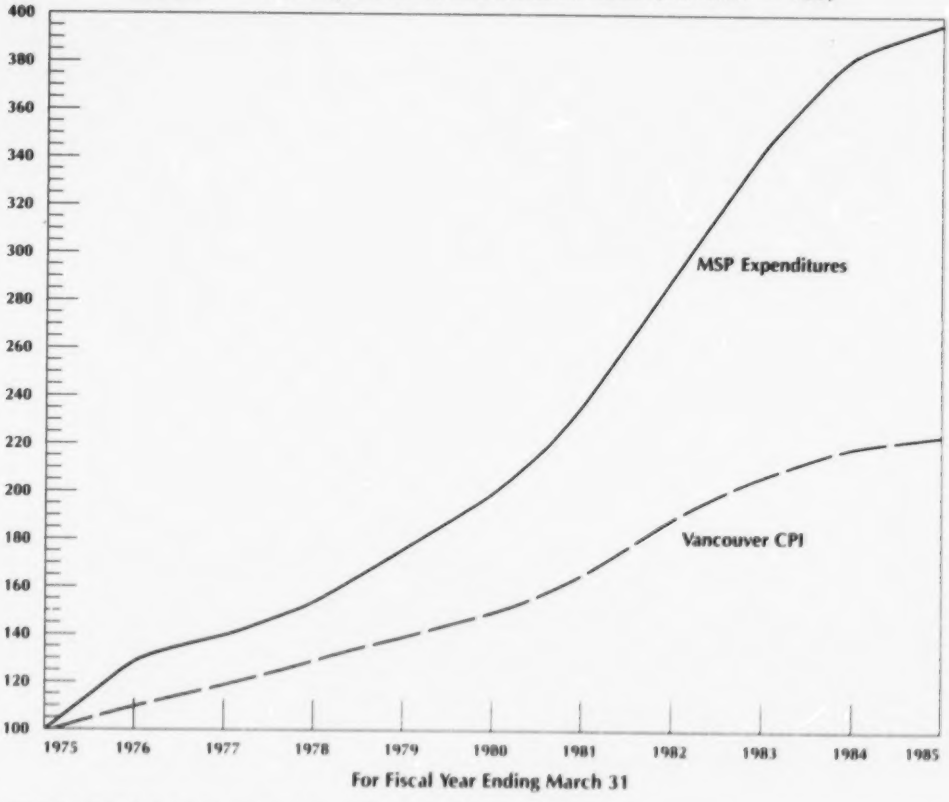

FIGURE 1 British Columbia Medical Costs and Inflation.

Medical Services Plan expenditures have generally increased more rapidly than the consumer price index since the early 1970s, despite noticeable slowdowns in medical spending growth in 1976/77 and 1984/85. From 1974/75 to 1984/85, medical services spending climbed an average of 14.8% annually, compared with average annual inflation of only 8.4%.

FIGURE 2 — B.C. Physicians Per Thousand Population

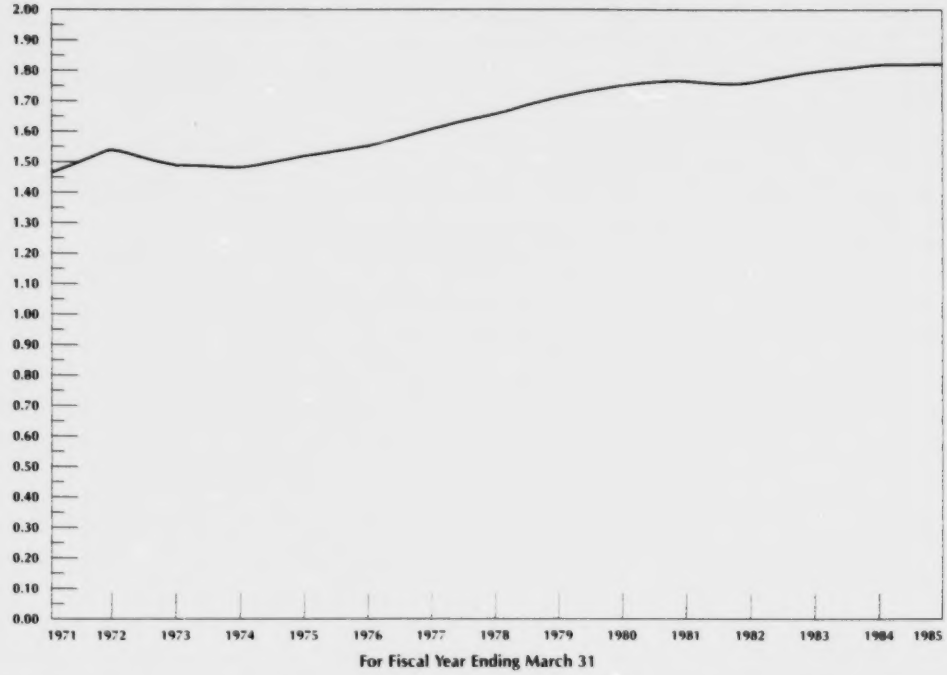

FIGURE 2 Population[1] and Medical Practitioner Growth[2], British Columbia, 1970/71 to 1984/85. (Percentage increase over previous fiscal year).

The population of the province grew by 1.58% in 1984/85 over 1983/84 and by 1.06% in 1983/84 over 1982/83.

The growth in medical practitioners in 1984/85 was 1.81% over 1983/84 and 3.00% in 1983/84 over 1982/83. If 1984/85 physician density had been the same as in 1970/71, there would have been 1,000 fewer physicians billing the Medical Services Plan.

[1] Statistics Canada data as of July 1.
[2] Number of Physicians receiving any payment from the Medical Services Plan.

Preventive Services

PREVENTIVE SERVICES

Preventive Services is the division of the Ministry of Health dedicated to creating — through education, promotion and sanitation — a living environment where the conditions that cause or promote disease are eliminated or minimized. The preventive work is done in the community, in schools and at the work place by public health nurses, public health inspectors, nutritionists, orthoptists, dental hygienists, epidemiologists, and speech and hearing professionals.

The senior staff and divisional consultants are located in Victoria. Services at the community level are provided by health unit staff. There are 16 Provincial health units throughout British Columbia, and similar preventive services are available in Vancouver, the North Shore (North and West Vancouver), Richmond, Burnaby, and the Capital Regional District, although these health departments are not staffed by provincial employees. In addition, the Vancouver Bureau, comprising the provincial laboratory, venereal disease control, tuberculosis control, kidney dialysis service and occupational health division, is also the responsibility of the Assistant Deputy Minister, Preventive Services.

Public Health Inspection

Public health inspectors are responsible for the administration of regulations under the *Health Act*. The objective is to document insanitary conditions or violations of prescribed standards and to achieve corrective action through instruction, or enforcement if necessary.

Inspections, which are carried out periodically or in response to complaints, involve food premises, public places, personal service establishments, housing and institutions, community care facilities, water supplies and sewage disposal systems.

Complaints of nuisances, offensive trade, insanitary conditions and vermin or pest infestations are investigated and corrective action is initiated. Reports of communicable, food-borne or water-borne illness are investigated and measures taken to eliminate the probable source and the mode of transmission.

Through consultation and promotion, public health inspectors also contribute to an orderly development of the community. Inter-agency referral protocol provides for a public health perspective regarding proposed community plans, land-use bylaws, subdivisions, and resource and waste management policy. Sanitary practice is promoted by participation in staff training courses involving the hospitality industry and voluntary catering groups, and by attending meetings of various community organizations.

Plans for proposed development of food premises, pools and sewage disposal systems are reviewed to ensure compliance with prescribed standards.

In 1984/85, public health inspectors in 14 of the 16 Provincial health units participated in a pilot project in developing a computer-assisted activity report/program evaluation system. The project focused on inspection of premises carried out during the 1984 calendar year. Data compiled included the number of inspections carried out, the number and nature of insanitary conditions or violations documented, and the number of follow-up inspections required to initiate correction. The computer-assisted system is expected to be in place in 1986.

Public Health Nursing

Public health nursing services foster provision of nursing service on a family-centred basis for individuals and groups, at home, at school, in public health centres and other community-based locations. Primary objectives of all programs are the promotion of good health practices and public education and support for personal involvement in one's own health care.

The problem of child abuse in homes and in community care facilities has been the subject of considerable concern. The Provincial Child Abuse Policy Manual, prepared by an inter-ministerial committee representing the Health, Human Resources, Education and At-

torney General's Ministries, was in the process of revision during the year, for distribution later in 1985.

Special attention has been given to improving parenting skills through group discussions, interactive television and individual counselling. In addition, preconception health groups for youth and adults are being offered in a growing number of health units.

A high priority continues to be given to the perinatal program with an emphasis on prevention of low birthweight in infants through good prenatal care.

A two-phase evaluation of the "Health Passport" for children is being carried out with public health nurses and parents. This is British Columbia's health record for children, which has been used for the past five years. Discussions have also been held with Federal representatives to consider the possibility of having certain sections of the passport similar in format to that of the Federal "Child Health Record".

Special activites throughout the province to promote the use of infant car seats resulted in a 15% increase in usage in 1984 over 1983. Further increases are expected as a result of Provincial legislation making infant car seats mandatory, which went into effect on March 1, 1985.

A time study done in 1983/84 showed that 14.4% of public health nursing time is spent in providing health services to preschool children. This is a 4% increase over the time spent with this age group in 1980/81. The increase is due to the emphasis being placed on improving immunization levels and to the rise in reported cases of child abuse, resulting in more parent education services.

The provincial average for immunization of preschool children reached the following levels: diphtheria, whooping cough and tetanus — 77%; polio — 88%; measles — 85%. The objective is to achieve a 90% immunization rate for this age group.

Public health nurses also conduct programs for school-aged children. In 1984/85, a school health profile was developed to assess health service needs in individual elementary schools.

The annual review of immunization status of children in Grade 1 showed continued improvement, as follows: diphtheria, whooping cough, tetanus — 94% in 1984/85, up from 92% in 1983/84; polio — 94%, up from 93%; measles, mumps, rubella — 95%, up from 93%; rubella (Grade 5) — 96%, up from 95%.

The primary objective of public health nurses working with adults is to create an awareness of the need to achieve and maintain good health. Counselling is provided on healthy lifestyles, nutrition and stress reduction. Various methods are used to inform the public regarding wellness, such as health fairs, seminars and group education. Public health nurses conduct adult immunization clinics to protect against influenza and other diseases preventable by vaccination.

Dental Health Services

The Division's objectives focus on the development of maximum prevention of oral diseases through responsible individual behavior, including the promotion of lifetime preventive home-care skills, the encouragement of regular visits to the family dentist, the use of community and self-applied fluorides, and good nutritional habits.

The Division also assists with the provision of dental treatment in areas which have no dentist through the dental extern service. Preventive and treatment services are also organized for the handicapped, the elderly and for those confined to institutions, in co-operation with the College of Dental Surgeons of British Columbia.

Services are provided by regional teams composed of supervising dental hygienists, staff dental hygienists and dental assistants. School programs are the main focus, so that the opportunity provided by classrooms can be used to teach and motivate young people about prevention and control of dental diseases. Children's teeth are checked and referrals are made

to parents if the need for treatment is evident. This system is also used to monitor the dental health of children at specific grade levels.

Preschool programs in 1984/85 were organized in 123 preschool facilities for 3,878 children. Of these, 1,108 were inspected and appropriate referrals to parents were carried out.

School dental services were provided for 88,000 elementary school children. This included monitoring the level of the dental health through inspection and parental referral at Kindergarten, Grade 1 and Grade 7. Development of oral hygiene skills, brushing and flossing were emphasized at other grades, particularly Grades 3 and 5, consistent with the children's development of hand skills. For the first time, monitoring of dental health was started at the Grade 10 level to determine whether the positive results from elementary school carried over into high school. While only 4,374 were screened, the preliminary evidence of increased tooth mortality suggests that reinforcement at the high school level is needed.

Provincial surveys 35 years ago indicated that 49% of all 15-year-old children had lost one or more permanent teeth. By 1980, this had been reduced to about 8%, and subsequent information suggests trends toward over-all improved dental health levels are continuing.

Results from this year's dental inspections of all children in Kindergarten, Grade 1 and Grade 7 in the school districts where programs operate follow the same pattern. The trend is for an increasing number of children to be entirely cavity free. British Columbia has already surpassed, by 13%, the World Health Organization's goal of 50% of five-year-olds being caries free.

The Division has also been active in attempts to improve the dental health of people in long-term care institutions. At the Division's request, the Victoria and District Dental Society and the Vancouver and District Dental Society formed Long Term Care Committees. Subsequently, the College of Dental Surgeons formed a provincial committee to encourage and enable dentists to serve this group of people everywhere in the province. Screening and treatment programs were started in a number of care facilities in Vancouver and Victoria. In the Provincial health units, hygienists and dental assistants screened 468 clients in care facilities, referred 236 to dentists, cleaned 375 sets of dentures and marked 413 dentures for easy identification by care staff.

The Ministry granted $68,200 to the Dental Faculty at the University of British Columbia to treat children during the summer months when the university is usually closed. This grant employed 22 dental students and eight dental hygiene students to provide dental care for 1,145 children from Vancouver, Burnaby, Richmond, Boundary Health Unit and Simon Fraser Health Unit.

British Columbia continues to have the most favourable dentist to population ratio in Canada. This has improved to one dentist for each 1,600 persons in 1984/85 from one for 1,700 persons in 1982/83. The combined metropolitan areas of Greater Vancouver and Greater Victoria have the lowest ratio (1:1,229) while the northern region has the highest ratio (1:2,700). The other regions of the province have a ratio close to 1:2,000. The Division compiles these manpower statistics annually by school district, so that new dental graduates and dental specialists can be encouraged to locate in the school districts with the greatest need of practitioners.

Dentists are now fairly well distributed throughout the province. Consequently, the dental extern program this year was the smallest ever, serving Atlin, Hudson Hope and Grassy Plains with one dentist. More than 2,200 people from these communities received complete dental care in 1984/85. The Ministry recruits the dentist and supplies the equipment but the usual dental fees charged for treatment make it an otherwise self-sustaining program.

Nutrition

The Nutrition Branch develops and co-ordinates a community nutrition program for Provincial health unit staff, various government departments, allied professions, training schools and the general public. Information focusing on nutrition, as it relates to positive

aspects of health and lifestyle, is provided through direct consultation with health professionals, media involvement, publications, workshops, assessment of community care facilities and operational research. Consultative services are made available on request to institutions and other departments of government. A number of community nutritionists are located in health units to provide service to the local communities.

In 1984/85, the Branch's priority was maternal and infant nutrition. In-service training sessions on maternal and infant nutrition for health professionals, including public health nurses, prenatal class instructors, dietitians and physicians, were conducted in all health units, based on manuals produced in 1983/84.

The maternal and infant focus requires a five-year commitment, and full results will not be available until 1988. However, in the past three years the incidence of low birthweight has dropped from 5.3% to 4.9%.

A pilot outreach program for nutritionally at-risk pregnant women was introduced in the Kamloops area, where the rate of low birthweight infants has been considerably higher than the provincial average. Print and radio media were used to alert the public to nutrition risks prevalent in the community, and high-risk counselling services were increased.

Adults living in care facilities are another special focus of Nutrition Branch activities. While continuing the present nutrition program in adult-care facilities, a review of the nutrition regulations for licensed facilities was undertaken, and a nutrition manual for facility operators was prepared. The manual will become the basic reference for facility operators in designing and implementing their nutrition services.

Several issues required immediate attention in 1984/85, including osteoporosis and low-income food budgeting. Updated information on osteoporosis was prepared by the Branch and distributed to health professionals throughout British Columbia, and in conjunction with the B.C. Dairy Foundation, a self-instruction pamphlet was developed for the general public. A complete information kit on low-income food budgeting was prepared and distributed to agencies which provide counselling on budgeting.

During 1984/85, community nutritionists reached at least 235,000 British Columbians living in the 16 Provincial health units, through presentations to the general public, media interviews and workshops and consultations with other health professionals. Two-thirds of this activity involved maternal and infant nutrition. In addition, community nutritionists consulted with 974 adult-care agencies regarding the nutritional care of their residents, assessed 166 agencies for adequacy of nutritional care, and gave 68 presentations to 2,480 participants.

Fitness

The Fitness Branch promotes increased participation in physical activity and lifestyle programs which lead to improved physical fitness for at-risk groups. Programs educate individuals and improve their motivation to engage in fitness activities, increase the availability and accessibility of programs which encourage and support participation in fitness activities, and improve the social and physical environments which support participation.

Program activities are aimed at specific groups in the community, school system and workplace. Specifically, target groups are at-risk elderly persons, hospital employees susceptible to back injury, youth prone to weight management concerns, sedentary employee groups, and the pre-retirement population. Specific professional and volunteer groups which are selected for leadership activities include public health nurses, co-ordinators of pre-retirement seminars, psychiatric nurses, health care workers, other hospital staff, teachers and fitness leaders.

Highlights of Fitness Branch programs in 1984/85:

- Back Check, a program to reduce compensable back injuries, was initiated as a pilot project at Valleyview Hospital.

- Keep Well, a program designed to improve the health status of at-risk elderly persons through health promotion and self-care activities, was initiated in New Westminster as a pilot project.
- Feeling Great, a program to promote physical activity, nutrition and social support mechanisms for elementary school children, was initiated in Coquitlam and Burnaby as a pilot project.
- The development of fitness information packages: PHN Notes, for public health nurses, and FitTips, for the general public.
- The development of a fitness and health promotion module, Choosing Health, for pre-retirement seminar participants and leaders.

The result of the three pilot projects will be evaluated instructional resource packages which can be used in other settings throughout the province.

The services of the Fitness Branch are delivered through grant funding to volunteer and private sector organizations and through consulting, advisory, and program development services of Branch staff. The Branch also provides an employee fitness and health promotion program for Victoria-area Provincial public servants.

Epidemiology

The Division of Epidemiology continued to publish *B.C. Disease Surveillance* every four weeks.

Among special investigations undertaken were: carbon monoxide in ice arenas; penicillin-resistant gonorrhea; diseases associated with the consumption of raw milk; campylobacter and pregnancy; rabies and bats; outbreaks of measles; haemophilus influenzae epiglottitis; salmonella food poisoning; outbreak of scabies in a hospital; and atypical mycobacterial infections.

TABLE 13

Reported communicable diseases, British Columbia, 1979-1984

Disease	1979		1980		1981		1982		1983		1984	
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate
Amoebiasis	21	0.8	77	2.9	79	2.9	75	2.7	180	6.4	203	7.1
Botulism	—	—	—	—	—	—	2	0.1	7	0.3	1	*
Brucellosis	—	—	—	—	1	*	—	—	2	0.1	1	*
Diphtheria	9	0.4	11	0.4	3	0.1	1	*	—	—	—	—
Hepatitis A	459	17.9	343	13.0	280	10.4	295	10.6	179	6.4	253	8.8
Hepatitis B	7	0.3	17	0.6	25	0.9	18	0.6	70	2.5	170	5.9
Leprosy	—	—	2	0.1	1	*	4	0.1	—	—	—	—
Measles	1801	70.2	242	9.2	50	1.9	51	1.8	72	2.6	1139	39.7
Meningitis-Bacterial	76	3.0	37	1.4	38	1.4	65	2.3	101	3.6	115	4.0
Meningitis-Viral	14	0.5	37	1.4	35	1.3	42	1.5	23	0.8	69	2.4
Pertussis	286	11.1	534	20.3	283	10.5	212	7.6	88	3.1	32	1.1
Poliomyelitis	1	*	—	—	—	—	—	—	—	—	—	—
Rubella	237	9.2	102	3.9	52	7.9	79	2.8	180	6.4	119	4.2
Salmonellosis	810	31.6	857	32.5	881	32.6	705	25.3	940	33.3	919	32.0
Shigellosis	163	6.3	158	6.0	265	9.8	186	6.7	151	5.4	134	4.7
Tetanus	4	0.1	—	—	—	—	2	0.1	—	—	—	—
Trichinosis	1	*	—	—	—	—	—	—	—	—	—	—
Typhoid and Paratyphoid	18	0.7	9	0.3	13	0.5	7	0.1	17	0.6	3	0.1

Rates are per 100,000 population.
* Rates not calculated for single cases.

Speech and Hearing

During 1984/85, over 75 speech-language pathologists, audiologists, and audiometric aides in community health unit offices continued to make progress toward the goal of eliminating or measurably reducing the effects of communication disorders related to speech, language and hearing impairments.

With a continued emphasis on pre-school and young school-age children, and on the prevention of long-term problems, speech-language pathologists delivered services to over 1,700 clients in 1984/85, with an annual success rate of remediating and dismissing cases in excess of 50%. In the prevention-oriented Hearing Program, some 16,000 audiologic assessments and over 5,000 hearing aid evaluations were conducted, representing a combined increase of about 2,500 evaluations over 1983/84. Of the priority audiologic services provided, school hearing screening was completed on over 36,000 children, compared with 27,000 in 1983/84. The 17,000 infant high-risk hearing register screenings in 1984/85 exceeded the previous year's figure by almost 700.

An eight-year study of the Infant High Risk Hearing Register was completed, and confirmed the validity and cost-effectiveness of this register.

A reorganization of the Ministry of Health's relationship with the Western Institute for the Deaf took place in 1984/85, with the provision of partial funding for the institute's audiologist position reverting to the Ministry of Health from the Ministry of Labour.

Audiology services were expanded to Richmond in March, 1985, with the opening of an audiology clinic located on the premises of Richmond Health Department, with funding and staff provided by the Ministry of Health. As well as providing audiology services to Richmond residents, the clinic provides specialized diagnostic services to clients of the Worker's Compensation Board, including evaluation of patients with head injuries. In addition, the Richmond clinic provides a site for training students in audiology and speech pathology programs in conjunction with the University of British Columbia.

Vision Services

Vision Services promotes "healthy eyes", with emphasis placed on early detection and treatment. Program priorities are infant, preschool and kindergarten vision screening. Uncorrected refractive errors, amblyopia and strabismus can lead to permanent loss of vision in the affected eye if not detected and treated, preferably by age six. These abnormalities occur in approximately 4.5% of this age group.

In 1984/85, consultative services were provided by the Provincial Orthoptist to over 250 public health nurses, nursing students, health unit aides and volunteers.

An evaluative school vision screening program research study of 5,718 students was conducted in Prince George. The primary objective was to determine which grade(s), when vision screening was carried out, contained the lowest proportion of students with newly-detected visual problems. Results indicated that no single grade contained a significantly lower proportion. Therefore, routine vision screening is to be continued in Kindergarten, Grade 1 if not previously screened in Kindergarten, Grades 3, 5 and 7.

A new vision screening referral and follow-up card was tested in three health units. The card notifies parents that a more complete eye examination is recommended for their child. After a successful trial period, the card will now be used for all vision referrals throughout the Provincial health units.

Community Care Facilities Licensing

In 1984/85, responsibility for administration of the *Community Care Facility Act* pertaining to adult-care facilities was transferred within the Ministry of Health from Institutional Services to Preventive Services. In 1982, a similar transfer had taken place with regard to child-care facilities. Within Preventive Services, administration of adult-care licensing is carried out

by staff of the Division of Public Health Inspection. Child-care licensing administration is the responsibility of the Division of Public Health Nursing.

Child Care Licensing

Child care facilities for children up to 19 years of age are licensed by the Ministry of Health under the authority of the *Community Care Facility Act* and the Provincial Child Care Facilities Regulations. The purpose of the licensing program is to ensure that a minimum standard of care is in place for the health, safety and well-being of children in care outside their homes.

In British Columbia, there are nine categories of child care programs available to meet the needs of young children and to provide flexibility to parents so they may choose the type of care most suitable for their child.

There has been constant growth in the number and capacity of child care facilities: in 1984/85, there were 2,099 licensed facilities with a total capacity of 29,425, compared with 1,734 facilities with a capacity of 28,226 in 1983/84.

On approval by the Provincial Child Care Facilities Licensing Board, Preschool Supervisor Certificates are issued to graduates of Early Childhood Education programs who have completed one year's equivalent of satisfactory work experience. Certificates are renewed every three years, and since this renewal criterion commenced in 1983, certificates have been issued as follows: 2,065 for working with children aged 3 years to school age; 173 for working with children under age three; and 52 for working with children who have special needs.

Legislation was passed in 1984 to allow for emergency care for children. This type of facility can provide care for up to 72 hours for children aged three months to school age. It assists parents who need to have their children in safe care during household emergencies.

During 1984, the Provincial Child Care Facilities Licensing Board heard two appeals and suspended six licences. Of those suspended, all were placed on interim permits and, subsequently, five closed voluntarily.

Adult Care Licensing

The purpose of the Adult Care Licensing program is to ensure a minimum standard of health, safety and well-being for persons 19 years of age and older in premises licensed under the *Community Care Facility Act*.

Categories of facilities licensed by the Provincial Adult Care Facilities Licensing Board include personal-care homes, intermediate-care homes, facilities for the treatment of alcohol and drug abuse, and facilities for the psychiatrically disabled and the mentally handicapped.

Statistics for 1985 show that 629 facilities with a total capacity of 21,921 beds held full licences or interim permits at year-end. Licences for a further 60 facilities with a total capacity of 815 beds had been suspended, surrendered or cancelled.

VANCOUVER BUREAU

The Bureau consists of a variety of services located in the Vancouver area, including the Divisions of Tuberculosis Control, Public Health Laboratories, Venereal Disease Control, Occupational Health and the Medical Supply Service (Kidney Dialysis Service). The headquarters and central service facilities in Vancouver include registries for venereal disease, tuberculosis, and kidney dialysis service.

Occupational Health

The Division of Occupational Health is primarily responsible for promoting the occupational health of Provincial Government employees. It serves all Provincial ministries, the B.C. Ferry Corporation and the B.C. Buildings Corporation. The Division focuses on both employee

health and hazards of the working environment. It works closely with officials of the various ministries and crown corporations, the Federal Government, the Workers' Compensation Board, the B.C. Medical Association and many private health-care agencies.

The main objectives, in terms of the health of public servants, are to improve and maintain well-being, to prevent illness, injury and incapacity, and to assist in the vocational rehabilitation of disabled workers. To help ensure a safe workplace, the Division participates with other health and safety professionals in the identification, evaluation and control of workplace hazards.

For the Division, 1984 was a particularly busy year because of the demand for personal medical services, the need to increase the level of preventive health care for employees exposed to tuberculosis in downtown Vancouver, and the completion of a 1980-83 study on the background radiation level in British Columbia.

The Division pursues a systematic approach to worker health care by providing a comprehensive occupational nursing and physician program. Occupational physicians carried out 4,768 medical examinations in 1984, compared with 4,158 in 1983. The occupational nurses recorded 11,843 patient visits in 1984, compared with 10,257 in 1983. As well, the Division monitored the Video Display Terminal Operator Eye Examination Program (involving 258 employees) and provided medical advice on the cases of 684 employees managed by the Vocational Rehabilitation Program of the Provincial Government.

In the spring of 1984, TB screening was increased for employees working in downtown Vancouver. This led to early awareness of an active case of tuberculosis in a social worker and the subsequent development of a task force program to co-ordinate the TB screening of government workers in the downtown core. In all, at least 589 employees were screened, with 91% receiving tuberculin skin tests. This prompt response, in conjunction with the Division of TB Control, probably prevented other active cases. A similar program was instituted in the Lower Mainland Regional Correctional Centre, where 256 employees were successfully screened. In 1984, at least 846 tuberculin tests were carried out, compared with 477 in 1983.

The Radiation Protection Service of the Division surveyed all dental x-ray units in British Columbia in 1984 using thermo-luminescent dosimeter (TLD) chips. The survey was to determine variation of dental bite-wing x-ray exposure to patients. The results were used as a screening procedure for follow-up investigations by radiation protection officers. Approximately 40% of the dental x-ray units produced a standard bite-wing exposure in excess of recommended exposure guidelines. Follow-up surveys revealed the major causes of these overexposures to be darkroom/chemistry (59.8%), obsolescent equipment (19%) and mechanical faults (10.2%).

The results of the first three years of the environmental TLD program were compiled in the publication "Background Radiation Levels in British Columbia 1980-1983". This publication contains not only the TLD data, but also soil sample analysis of each site and background measurements made using other measuring techniques. This service has continued to work with the Department of National Defence in analysing water and mud samples from Esquimalt and Nanoose harbours.

A variety of non-ionizing radiation sources were also surveyed. These included ultraviolet devices such as tanning lamps, mercury vapour lamps and other ultraviolet sources. Dielectric heaters (radiofrequency devices) were surveyed for the Electrical Standards Branch and the Workers' Compensation Board. A large number of induction heaters were surveyed in co-operation with Health and Welfare Canada to determine radiofrequency fields about the machines, as background information for future regulatory consideration.

Several unusual surveys were also carried out, including a three-laser light show/rock concert. The primary concern was to ensure that the laser light did not strike the audience or performers.

Tuberculosis Control

In accordance with the *Health Act* and the Regulations for the Control of Communicable Diseases, all phases of tuberculosis prevention and treatment in British Columbia are directed by this Division. As well as providing various levels of out-patient care, the Division offers consultative services to private physicians, and advises health units regarding contact tracing of active cases, supervision of cases under treatment, preventive measures and screening and surveillance. The Division also co-operates with the Federal Government and other Provinces and works particularly closely with Indian Health Services to control tuberculosis among native Indians.

The decline in annual numbers of cases of tuberculosis in B.C. has slowed in the last decade. In 1983, the rate was 13.0 per 100,000 population (368 active cases) and, in 1984, 14.2 per 100,000 (407 cases). For the fiscal year 1984/85, the provisional rate was 12.4 per 100,000 (357 cases). In 1984/85, there were 47,087 patient-visits to the Division's clinics, compared with 35,774 in 1983; the corresponding number of chest x-rays read was 35,646 and 34,716 respectively, and the number of tuberculin tests was 13,380 and 12,335. Older males, disadvantaged persons and chronic alcoholics, persons not born in Canada and native Indians continued to exhibit higher rates of tuberculosis than the general population. The inner-city population of Vancouver is receiving special attention from the Division in co-operation with the Vancouver Health Department.

Although the over-all incidence of new, active tuberculosis has been declining over the past three decades, the actual number of cases and, therefore, the workload of the Division, has remained stable over a number of years. The selected segments of the population requiring routine screening for tuberculosis have been more closely defined and recommendations have called for reduced routine surveillance. This will now be based on individual rather than group indications, with a reduction in the number of chest x-rays taken.

Venereal Disease Control

The Division is responsible for controlling the spread of venereal diseases throughout the province. There are three major phases in this program: (1) training, updating, and consultation are provided to public health nurses, who are responsible for venereal disease control on a regional basis; (2) treatment for venereal disease is provided at no cost through physicians, health units, and clinics; (3) a central venereal disease clinic is conducted in Vancouver.

The Vancouver clinic sees over 20,000 patients each year and provides comprehensive evaluation, laboratory confirmation, specific treatment, follow-up, contact tracing, and extensive public information and education. On-going research and clinical drug trials are also conducted.

Medical Supply Service/Kidney Dialysis Service

The Kidney Dialysis Service, with assistance from the Vancouver Bureau Pharmacy and Central Supply Service, has continued to expand to meet the increasing demand for clients to be treated in their homes. At its inception in 1968, the service's original mission was to provide equipment and supplies for an average of 19 home hemodialysis patients throughout the province. A range of services and alternate therapy supplies and medication are now provided to 589 clients with end-stage renal disease, 73 clients with hemophilia, 20 clients on total parenteral nutrition, and three clients on enteral nutrition, for a total of 694 clients.

The major change that the Kidney Dialysis Service has been able to effect is that 52% of clients with end-stage renal disease are now being cared for in their homes or at the limited-care facilities in Vancouver and Penticton. The number of clients in limited care has increased from seven in 1977 to 34 as of March, 1985.

The Kidney Dialysis Service employs a nurse co-ordinator to promote organ donation and assist with organ retrieval for transplantation. In 1984, 31 kidney transplants were performed in British Columbia.

Presently, 400 clients in British Columbia are able to remain in their homes through services and supplies from Kidney Dialysis Service, thus avoiding admission to hospital for on-going treatment.

Provincial Laboratories

The Provincial Public Health Laboratories provide routine reference, referral and consultative services for the investigation, diagnosis, treatment and control of communicable diseases and for amelioration of environmental problems. The Main Laboratory is in Vancouver, with branches in Nelson and Victoria. The branch service in Victoria is provided by the Royal Jubilee Hospital's Laboratory under grant funding from the Main Laboratory.

Services include medical advice and laboratory tests for diseases caused by bacteria, fungi, parasites, viruses and other communicable agents, and related immunology, serology and environmental microbiology. Services are available to registered physicians, hospitals, health units and health-related agencies at all levels of government.

Services are provided at no direct cost to the users. Specimens are shipped to the laboratories at public expense, by courier, from all parts of the province.

Tests and Workload Units increased by 8% and 7% respectively in 1984/85 over the previous year. Tests were up to 642,361 from 593,040. Workload units reached 14,321,689, compared with 13,241,219.

The Provincial Laboratories continued to introduce new technology to improve services. During 1984/85, a more efficient and accurate enzyme immunoassay (EIA) test replaced the Hemagglutination-Inhibition (HI) test for rubella, resulting in a faster turn-around time for results. Automated Bactec equipment has improved the diagnostic capability of the tuberculosis laboratory. It enables some TB infections to be identified within three days, compared with six to eight weeks by conventional procedures. The year also saw the introduction of a computer system in the parasitology laboratory, and a pilot project successfully completed.

A new service introduced in 1984/85 involves testing for chlamydia, which is now considered the most commonly sexually transmitted disease. A chlamydia diagnostic service is now available to the Division of Venereal Disease Control Clinic.

Community Care Services

COMMUNITY CARE SERVICES

Community Care Services comprises four program areas: Alcohol and Drug Programs, Forensic Psychiatric Services, Mental Health Services and the Division of Vital Statistics. Under the direction of the Assistant Deputy Minister, the mandate of Community Care Services is to manage, develop and administer efficient and effective programs within these four areas, and in co-operation with other health services providers.

Alcohol and Drug Programs

Alcohol and Drug Programs is responsible for planning, funding and co-ordinating treatment and prevention programs related to the abuse of alcohol and other drugs.

The executive consists of the Executive Director, who is responsible for all aspects of program operation, a Medical Advisor, five Regional Managers, the Director of Program Development and Prevention, and the Director of Support Services.

The province is divided into five regions: Region I — Lower Mainland, Region II — Fraser Valley, Region III — South/Central British Columbia, Region IV — Northern British Columbia, and RegionV — Vancouver Island and the West Coast. Services are provided regionally through a "system of care" comprising outpatient counselling, detoxication services, and residential treatment, including residential treatment centres and supportive recovery homes. Alcohol and Drug Programs has direct responsibility for 16 out-patient clinics and three detoxication centres. It also ensures the operation, by contractual arrangement with a number of non-profit societies, of 26 out-patient clinics, four detoxication centres, nine residential treatment programs and eight supportive recovery homes.

The Support Services Division includes Administration, which deals with budgetting, financial accounting, federal-provincial cost sharing and other alternate and joint funding mechanisms, and identifying cost-efficient means of service delivery. An Evaluation section co-ordinates policies, procedures and guidelines and conducts program evaluations. The Systems section maintains an automated treatment information system which generates case-load, socio-demographic and financial reports.

A program laboratory provides urinalysis for up to eight major drugs of abuse and ensures quality control of methadone issued to patients. The pharmacy dispenses and controls the distribution of methadone and other medications to direct services and provides drug information.

The Program Development and Prevention Division includes prevention services, training, employee assistance (worksite abuse) programming, native programming, as well as a library, audio-visual services and agency liaison services.

Public utilization of treatment services has increased dramatically in the past decade. Caseloads have increased almost fourfold, from 8,552 admissions in 1975/76 to 32,493 admissions in 1984/85. In 1984/85, an estimated 120,000 persons in the province were considered unable to control their use of alcohol and drugs. Approximately one-fifth of this group utilized services provided by Alcohol and Drug Programs.

In 1984/85, services to younger clients, and training programs for counsellors, were increased in response to the proclamation of the *Young Offenders Act*. Development of a province-wide Y.O.A. information system continued, and additional psychologist services were provided at the Burnaby Clinic.

Alternate, joint funding and cost-effective means of service delivery were explored. In 1984/85, Federal-Provincial cost sharing recoveries to the Province were estimated at $6.5 million.

Prevention services began a major planning initiative in early 1985, stressing the need for regional prevention planning, a clearly defined mandate, and prevention training for counsellors. In 1984/85, the division conducted 25 educational workshops for 500 community and professional participants, and developed 18 skill-building workshops for agency staff.

A special program consultant on Employee Assistance Programs (worksite-based programs designed to provide treatment to employees before productivity is impaired) represented the Ministry in a unique mandate to develop co-operative initiatives with employers and labour unions.

A report on native programming was completed and a training package was developed jointly with the National Native Alcohol and Drug Abuse Program.

Regional treatment services focussed attention on improving existing resources, establishing community and other contacts and developing strategies to better meet the needs of the community.

As part of an over-all emphasis on youth services, a unique program was established in the Nelson School District to apply the Employee Assistance Program model to the needs of a student population.

A focus on family programming led to a new family therapy program operating in Maple Ridge as an adjunct to residential treatment; a life skills program was offered in the South/Central region; and a public information project was developed by the Prince George Clinic.

An impaired-driving diversion project was modelled in a residential program in Kelowna, and community-based detoxication projects were demonstrated in Kelowna and Salmon Arm.

New full-time out-patient services were established in Smithers and Tumbler Ridge, as were part-time services for New Westminster, Coquitlam and Port Coquitlam.

A table indicating comparative admissions to treatment, by region and type of agency, for fiscal years 1983/84 and 1984/85, and notes to the table, follow.

TABLE 14

Alcohol and Drug Programs
Utilization statistics

Region	Detoxication Facilities		Residential Facilities		Outpatient Counselling		Supportive Homes		Total Regional Agencies	
	83/84	84/85	83/84	84/85	83/84	84/85	83/84	84/85	83/84	84/85
GREATER VANCOUVER										
Admissions	14,537	13,627	88	94	2,493	2,175	1,614	2,608	18,732	18,504
Individuals	7,246	6,593	95	103	2,843	2,663	1,380	1,978	10,362	10,171
No. of Agencies	3	3	1	1	9	9	7	7	20	20
FRASER VALLEY										
Admissions	1,624	1,285	811	746	874	834	374	374	3,683	3,239
Individuals	1,366	1,162	859	803	1,011	934	426	431	3,198	2,926
No. of Agencies	1	1	1	2	3	4	2	2	8	9
SOUTH CENTRAL										
Admissions	851	838	488	616	2,076	2,221	132	123	3,547	3,798
Individuals	626	632	507	636	2,505	2,684	142	122	3,265	3,535
No. of Agencies	1	1	2	2	12	12	1	1	16	16
NORTHERN B.C.										
Admissions	940	1,017	219	208	1,192	1,322	—	—	2,351	2,547
Individuals	581	607	233	222	1,380	1,556	—	—	1,837	2,025
No. of Agencies	1	1	1	1	12	14	—	—	14	16
VANCOUVER ISLAND AND WEST COAST										
Admissions	1,554	1,637	567	486	2,171	2,191	—	91	4,292	4,405
Individuals	815	807	592	525	2,581	2,512	—	101	3,560	3,529
No. of Agencies	1	1	4	3	9	9	—	1	14	14
TOTAL ALL REGIONS										
Admissions	19,506	18,404	2,173	2,150	8,806	8,743	2,120	3,196	32,605	32,493
Individuals	9,987	9,295	2,262	2,272	10,194	10,245	1,863	2,554	20,280	20,429
Per cent Admissions/ Region	60%	57%	7%	6%	27%	27%	6%	10%	100%	100%

Notes to Utilization Table

1. The figure for "admissions" represents each entry into the system, and includes re-admissions.
2. The figure for "individuals" represents the actual number of clients in the system, and may include a carry-over of active caseloads from the previous year.
3. The table shows only client admissions. In addition, Alcohol and Drug Programs provided counselling and other treatment services to "collaterals", that is, to family members or friends of clients. In 1983/84, there were total of 2,596 collateral admissions in addition to 32,605 client admissions; in 1984/85, there were 2,916 collateral admissions in addition to 32,493 client admissions.

Forensic Psychiatric Services Commission

The Commission was established by an Act of the Legislature in 1974 to provide psychiatric services to mentally disordered offenders who are involved in the justice system.

Specifically, the Commission provides: assessment of individuals remanded by the court for psychiatric examination; diagnosis and treatment of individuals found "unfit to stand trial" or "not guilty by reason of insanity"; and diagnosis and treatment of persons who become mentally ill while in custody. It is also responsible for developing research programs and providing consultation to agencies and institutions in the correctional system.

The Commission consists of not fewer than five members, appointed by the Lieutenant-Governor in Council, and is administered by an Executive Director.

Forensic Psychiatric Services

Forensic Psychiatric Services carries out the responsibility of the Forensic Psychiatric Services Commission to provide psychiatric and psychological assessment services to the courts, and provides diagnosis, treatment and, in some cases, custody for individuals who were ordered into treatment as a result of conflict with the law.

Adult Services provides assessment and treatment services on an in-patient basis at the Forensic Psychiatric Institute located at Colony Farm, Port Coquitlam, which is a secure facility, and on an out-patient basis at established clinics both in Vancouver and Victoria, and travelling clinics at Prince George and Kamloops.

Juvenile Services to the Courts, under the *Young Offenders Act*, provides out-patient services through clinics located in Vancouver and Victoria, and travelling clinics in Prince George, Kamloops and Campbell River. These services include pre-trial assessments, court ordered pre-sentence disposition assessments, and treatment for young offenders diverted from judicial proceedings.

The Maples Adolescent Treatment Centre in Burnaby is a designated provincial mental health facility providing both secure and open residential treatment for psychiatrically ill adolescents. Full educational programs are provided on-site by the Burnaby School Board in co-operation with the Ministry of Education. Admittance is determined under the *Mental Health Act* from a variety of government sources, and by professionals in medical and mental health services.

The mandate of Program Support Services is to develop and maintain a cross-program human, financial and information resource base and planning capability that is responsive and relevant to the demands of the Forensic Psychiatric Services Commission, and Ministry and Branch programs.

During 1984/85, Forensic Psychiatric Services continued to provide court-ordered psychiatric assessment and treatment of accused or convicted adults at its two out-patient clinics, travelling clinics, and the 121-bed Forensic Psychiatric Institute at Colony Farm, Port Coquitlam.

With the implementation of the *Young Offenders Act*, out-patient assessment and treatment services to adolescents were greatly expanded through the Juvenile Services to the Courts clinics in Burnaby and Victoria.

A further eight beds of the Maples Adolescent Treatment Centre secure unit were opened, bringing the available beds to 60.

TABLE 15

Forensic Psychiatric Services
Utilization statistics

Adolescent Services	1983/84	1984/85
Maples Adolescent Treatment Centre		
Residential		
Admissions	67	65
Discharges	47	63
Day Program		
Admissions	3[1]	19
Discharges	—	10
Number receiving treatment during year	108	135
Active treatment at end of year	61	72
Referrals	134	117
Bed Utilization		
Beds available	52/60[2]	60
Bed days available	21,192	21,900
Percentage utilization	87.8%	95.5%
Juvenile Services to the Courts		
Burnaby Clinic		
Persons assessed	286	272
Persons treated	85[3]	184
Victoria Clinic		
Persons assessed	106	105
Persons treated	211	276

Adult Services	1983	1984/85
Forensic Psychiatric Institute		
Admissions	301	266
Discharges	294	260
Average population	109	93
Total remand days	5,696	5,028[4]
Total *Mental Health Act* days	5,754	3,091[4]
Total patient days	39,846	34,399[4]
Vancouver Clinic		
Referrals	601	628
Assessments	370	415
Activations	576	608
Closures	587	600
Victoria Clinic		
Referrals	70	85
Assessments	74	80
Activations	71	74
Closures	63	57

[1] New program in fourth quarter.
[2] Additional 8 beds added in second quarter.
[3] Estimated.
[4] Calendar 1984.

Mental Health Services

The Mental Health Services Division is responsible for ensuring that the mental health system in British Columbia provides efficient and effective care to residents of the province with mental disorders regardless of where they live or their socio-economic status. This task is accomplished through direct service delivery and by the over-all co-ordination of the mental health system, including services delivered by other divisions, ministries and private and voluntary agencies.

Services to the three demographic groups (children, adults, and the elderly) are delivered through several specific programs: Acute Care and Adult Services, Rehabilitation and Services to the Elderly, Children's Services, Community Residential Care and Alternate Care. These services are delivered by multi-disciplinary professional teams at Riverview Hospital, Burnaby Psychiatric Services, and 31 mental health centres and 20 sub-offices located throughout the province. In addition, the Division is responsible for administering a major grant to Greater Vancouver Mental Health Services, and for its operation.

Mental health programs are organized to achieve service objectives in four primary areas:

(1) *Promotion of Mental Health*

A philosophy of health is promoted that stresses individual responsibility for applying knowledge, behaviours, and techniques to promote and maintain physical, social and mental health.

(2) *Prevention of Mental Illness*

Health education activities and consultation are directed at identifying social, personal and behavioural factors which contribute to the incidence of mental disorders and to the duration and relapse of mental illness.

(3) *Treatment of Mental Disorders*

Programs are organized to provide early identification of mental problems, and prompt adequate treatment in order to prevent subsequent deterioration and to limit disabilities. Clinical services are intended to protect life, control aberrant behaviour, reduce and control symptoms, restore previous levels of functioning, and ensure that basic health, nutrition, hygiene, safety and housing needs are met.

(4) *Rehabilitation*

Mental health services are organized to help individuals with persistent or chronic mental disorders to achieve as high a level of adjustment as possible following acute or active treatment intervention.

Service priorities are developed and established through needs assessments involving Ministry staff, collaborating outside professionals and community agents. The ultimate goal is to reduce service duplication and develop a comprehensive care system.

For the Mental Health Services Division, the major priority is the active treatment and care for people of all ages who are experiencing the most serious mental disorders. These tend to be schizophrenic, paranoid, and other psychotic disorders, but do not exclude affective and some organically-based disorders.

Priorities are continually under review and are revised subject to changing social conditions, needs and problems.

During 1984/85, there was a significant increase in the number of referrals and admissions to the community mental health centres, Riverview Hospital, Burnaby Day Program and Greater Vancouver Mental Health Services over the previous year. There were a number of factors responsible for this increase, including: an increase in resources allocated to community-based services; an increase in the availability of out-patient care; and a general trend on the part of health-care providers to promote community care.

Mental Health Services to children were available to seriously disturbed adolescents at mental health centres. During 1984/85, 2,931 patients between the ages of 1 to 18 years were seen. Services offered to children included clinical assessment, treatment, and consultations.

With the introduction of the *Young Offenders Act*, additional professional clinical services were made available to communities outside of Victoria and Vancouver where the Forensic Psychiatric Services Commission provides services to the courts.

In 1984/85, a new rehabilitation program was established to provide therapeutic work and volunteer training to psychiatrically disabled adults. These new opportunities are being provided through private sector and non-profit agencies throughout the province. An increase of 50 beds was achieved for psychiatrically disabled adults capable of semi-independent living under the Group Homes for the Disabled program. With respect to services to the elderly, Mental Health Services initiated an inter-ministry committee to prepare a plan for the development of comprehensive service to meet the psychological needs of senior citizens.

TABLE 16

Mental Health Services
Utilization statistics

	1983/84	1984/85
Mental Health Centres (Including Burnaby Day Program)		
Admissions	12,491	14,209
Separations	10,804	11,323
Total Caseload	18,418	21,304
Riverview Hospital		
Admissions	985	987
Separations	1,098	1,156
Bed Days	294,962	318,519
Average occupancy per day	806	873
Burnaby Psychiatric Services		
In-patient		
Bed Days	8,551	7,574
Total Caseload	434	396
Greater Vancouver Mental Health Services		
Outpatient (Community Care Teams)		
Intake	4,674	5,150
Admissions	2,249	2,591
Separations	2,214	2,379
Average Caseload	3,513	3,500
In-patient		
Admissions	422	452
Separations	421	451
Bed Days	5,844	5,883
Community Residential Care		
Beds occupied per day (average)	1,450	1,495

Vital Statistics

The Division of Vital Statistics is responsible for the administration of the *Vital Statistics Act, Marriage Act, Name Act* and Part II of the *Wills Act*.

The *Vital Statistics Act* governs the registration of births, deaths, stillbirths, marriages, adoptions and divorces through a system of district registrars and the controlled issuance of certificates and photocopies of registrations. It includes special procedures for dealing with adoptions, delayed registrations of vital events, and effecting changes, corrections and cancellations of registrations.

The *Marriage Act* provides for the registration of ministers to solemnize marriage in British Columbia, the issuance of marriage licences, and the solemnization of civil marriages. The Act has procedures for dealing with various irregularities in marriage, upholding of caveats against a marriage, validation of marriage, and the issuance of orders of re-marriage. The *Name Act* provides for processing legal changes of name, including the election of a bride to retain her maiden surname, and the issuance of certificates of name changes. The *Wills Act* provides for receiving and registering notices of the filing of wills, and revocation or relocation of wills. It also makes provision for searches of will notices following the death of a testator and for issuance of certificates respecting notices on file.

The other function of the Division of Vital Statistics is to provide a biostatistical service to the Ministry. Statistical information is compiled from the Division's registries for the use of health planners. The British Columbia Health Surveillance Registry is maintained for the recording, classification and analytical study of congenital and handicapping conditions.

Demographic Features

British Columbia's 1984 population was estimated at mid-year to be 2,870,700, compared with 2,823,900 in 1983, an increase of 1.7%. There were 1,425,400 males and 1,445,300 females. A composite of the population shows that 28% was under 20 years of age, 45% between 20 and 49, 15% between 50 and 64 years, and 12% was 65 years and over.

There were 44,040 live births in 1984, an increase of 1.5% over 1983. On the basis of the total population, this represents a birth rate of 15.3 per 1,000 population. The fertility rate, based on the number of live births to the female population likely to experience a birth, was 5.8%, about the same as in 1983 and relatively unchanged in the past six years. About 7% of all live births were to mothers 35 years and older.

In 1984, the crude death rate was 7.1 per 1,000 population, unchanged from 1983. Ischemic heart disease and malignant neoplasms each accounted for 26% of all deaths, while cardiovascular disease contributed another 8%. Deaths from motor vehicle accidents numbered 533 in 1984; the rate of 18.6 per 100,000 population is a further decline from the previous two years and is the lowest since 1963. The suicide rate was 13.9 per 100,000 population, compared with 14.8 in 1983.

The infant mortality rate continued to drop, reaching 8.5 per 1,000 live births in 1984. About 50% of these deaths occurred during the first week of life.

TABLE 17

Registration, certificates, and other documents processed by Division of Vital Statistics, 1983/84 and 1984/85

	1983/84	1984/85
Registrations accepted under *Vital Statistics Act*[1]		
Birth registrations	43,356	46,638
Death registrations	18,897	18,025
Marriage registrations	26,562	23,432
Materials issued by the central office		
Certificates issued[2]	110,430	124,316
Photographic copies	36,721	25,779
Miscellaneous services[3]	18,302	7,080
Wills, filed and searches	69,384	84,598
Counter services		
Certificates issued		
Vancouver	22,789	25,741
Victoria	4,991	6,265
Telephone calls		
Vancouver	38,667	42,400
Victoria	20,824	18,012
Marriage licences		
Vancouver	5,064	5,063
Victoria	2,052	2,080
General information[4]		
Vancouver[5]	—	4,500
Victoria	2,571	2,197
Total revenue	$1,565,000	$1,650,959

[1] Excludes Registrations of Stillbirths, which approximated 310.
[2] Includes births, deaths and marriages.
[3] Includes changes, legitimations, etc.
[4] Includes general information inquiries, geneology inquiries, document revisions, etc.
[5] Information not available except for 1984.

Institutional Services

INSTITUTIONAL SERVICES

Institutional Services comprises three major programs: Emergency Health Services, Continuing Care and Hospital Programs. Each is headed by an Executive Director who reports to the Assistant Deputy Minister, Institutional Services.

Emergency Health Services Commission

The Emergency Health Services Commission was established in July, 1974, to provide prehospital ground and air ambulance service. In addition, the Commission is responsible for the medical aspects of disaster planning, including maintenance of Federal emergency medical supplies, which are stockpiled around the province.

For operational purposes, the province is divided into six regions, each under the supervision of a regional manager. The Commission also operates a Vehicle Modification Depot to convert commercial vans into ambulances.

In 1984/85, the Commission operated 332 ambulances from 183 stations. Five Regional Dispatch Centres, located in Kamloops, Nanaimo, Prince George, Vancouver and Victoria, receive the majority of requests for ambulance service. The Provincial Dispatch Office in Victoria co-ordinates the movement of patients transported by air.

During 1984/85, the service responded to 213,882 calls, which represented a slight decrease over the 1983 call volume. There were also 4,465 patients moved by air on 4,438 flights (occasionally there are instances where more than one aircraft is used, or more than one patient is carried), a 6.15% increase in air ambulance flights over 1983.

Air ambulance services are provided by B.C. Government aircraft and supplemented by suitable charter aircraft when required. Permanent "airvac" Advanced Life Support and Infant Transport Team crews are stationed in Vancouver. These crews are Emergency Medical Assistant IIIs and have advanced life support training. Preparation is under way to establish advanced pediatric training and it is hoped that this will be available to crews in 1986. The crews work staggered shift patterns to accommodate the peak requirement period.

Fees for ambulance services have historically been billed by charging a basic rate, plus an amount per kilometre travelled for distances in excess of 40 km. There are two basic billing rates: the applicable rate is determined by whether the patient is a B.C. resident, or whether a corporate entity or non-resident is responsible for payment of fees. In 1984/85, rates for residents were $28 for the first 40 km, plus 29 cents per km, up to a maximum of $180. Rates for non-residents were $72 plus $1.37 per km, with no maximum. There is no extra charge for air ambulance service or for trained escorts where these are approved prior to the journey.

Wherever possible, operations are confined to the province. However, in certain instances, because of geographical locations (such as those areas adjacent to the Alberta border) patients will be taken to Calgary or Edmonton hospitals at no extra charge. For non-residents, industrial accident victims, Workers' Compensation Board and other agency cases, charge for service is based on time and distance travelled.

The Emergency Health Services Academy of the Justice Institute of B.C. provides training under contract to Commission employees. During the 1984/85 fiscal year, $847,548 was paid to the Academy, which provided approximately 25,000 "student training days" of instruction.

There are three levels of training provided to Commission employees: Emergency Medical Assistant I — 80 hours training; Emergency Medical Assistant II — 240 hours training; Emergency Medical Assistant III — up to 18 months special training.

During 1984/85, the Commission employed 628 full-time ambulance attendants and 56 full-time dispatchers. In addition, there were approximately 2,000 part-time attendants.

Full-time staff included 502 EMA IIs and 118 EMA IIIs. EMA IIIs were located in Vancouver, Kelowna, Kamloops, Chilliwack and Victoria. Classes were scheduled for EMA III training in Prince George for late 1985.

During the year, ambulance accommodations were rebuilt or underwent renovations in several locations. Additionally, the Vancouver administration office was relocated to more practical and modest accommodation. Changing needs dictated redeployment of some existing personnel and the opening of a new station in Coquitlam.

The Commission undertook a review of stations with low call volume in order to maximize cost-effectiveness. Staffing and other adjustments were implemented where possible.

All ambulances in the province were previously of the "box" design, capable of carrying five patients at a time. In many instances there was no requirement for such a large vehicle and the Commission decided that a smaller vehicle would prove more cost-effective. To this end, 50 smaller van-style ambulance were produced, at a retail cost saving of approximately $4,000 per unit.

Emergency Health Services members work actively with their local communities to encourage citizen participation in pre-hospital care. Examples of this activity include training in cardio-pulmonary resuscitation, visits to schools, publication of a children's "emergencies" colouring book, and an active public relations program with mall displays and information pamphlets.

Continuing Care Division

The Continuing Care Division consists of the Long-Term Care, Home Nursing Care, and Community Physiotherapy Programs. These programs integrate health-care services for handicapped and infirm adults, especially the elderly, into a single comprehensive range of services. The philosophy of the Continuing Care Division emphasizes the role of the family and the community, by involving the family wherever possible and by providing services to ensure that the individual and his family are able to cope within their own resources.

The nature of the Continuing Care Division has required the establishment of a decentralized professional organization, with headquarters in Victoria providing over-all policy direction and control. The programs are delivered at the community level through 16 Provincial health units and five municipal health departments. Field administrators based in each of the 21 local offices are responsible for the co-ordination and administration of the programs in the community. This responsibility includes the identification of service needs, the development of societies or volunteer groups to initiate or expand resources, and the provision and co-ordination of services and resources within the community.

The Long-Term Care Program is designed to assist adults with long-term, health-related problems to maintain an optimal level of independent functioning. Services may be provided in the home, the community, or in a residential care setting. The Continuing Care Division refers clients to appropriate agencies or programs, and purchases services on behalf of individuals eligible for Long-Term Care Program benefits.

The Community Physiotherapy Program provides direct treatment, consultative and preventive services to clients in their homes, arranges provision of required equipment to cope with physical disabilities, and trains family members in assisting clients. There is no charge for services, but equipment such as wheelchairs, walking aids, and other devices is not funded by the program.

The Home Nursing Care Program provides professional nursing services by Ministry of Health staff. The program provides nursing care to patients who are discharged early from hospital, who require home nursing care services as an alternative to admisssion to an acute-care hospital, who are terminally ill, or who require in-home nursing service on a long-term basis.

During 1984/85, the Division made significant strides towards maintaining Long-Term Care Program clients in their own homes and communities. The Division was able to close Skeenaview Lodge in Terrace, a government institution, and replace it with a modern intermediate-care facility. Many of the former Skeenaview residents were able to return to their

families or transfer to a facility in their home communities. Residents wishing to remain in the Terrace area were able to take up residence in the new Terraceview Lodge.

Similarly, in recognition of the Long-Term Care Program's role as a provider of residential care to the aged and the handicapped, the Division transferred the responsibility for a number of facilities to other areas of the Ministry. Starting in 1984, Mental Health Boarding Homes were transferred to Mental Health Services. This process of transferring facilities licensed for Specialized Residential Care to Mental Health Services will continue as the number of clients in the facility requiring mental health related services increases. Also, responsibility for the staff of the Provincial Adult Care Facilities Licensing Board was transferred to Preventive Services.

A revised funding system was introduced in April, 1984, for both private and non-profit facilities in the Long-Term Care Program. This new system was implemented in order to eliminate funding inequities between the public and private sectors, and to ensure efficient, effective and equitable service delivery. The reimbursement formula is based on three major groupings of costs: staffing; capital; and administration, supplies and other costs. A study was initiated during 1984/85 to make recommendations to the Ministry on the reimbursement of property charges for non-profit and privately-operated facilities.

Work is under way to develop and implement a planning model for all services delivered through the Continuing Care Division. The intent is to develop a model which rationalizes services in an integrated, comprehensive manner. The model itself is population-based and will provide 5-to-10 year projections of need for each health unit and for the province as a whole.

The Division implemented a new module, the Provider Claims Sub-system, as an expansion of the computerized payment system. The system has improved expenditure reporting and control, improved statements of account to agencies in terms of detail of information and speed of turn-around, and provided a saving in clerical support time.

The Long-Term Care Program was able to achieve a significant increase in the number of clients receiving Homemaker services, with an additional 2,700 clients being served during 1984/85.

Access to Adult Day Care services was increased with the opening of new centres in Vancouver, New Westminster, Victoria and Duncan.

Recognizing the need for home nursing services throughout the province, the Division extended the Home Nursing Care Program into Smithers and Chetwynd.

The Community Physiotherapy Program served 2,338 new patients in 1984/85, compared with 1,880 in 1983/84. Of these, 421 (18%) were aged 81 or over, 1,154 (49.4%) were 65 to 84, and 763 (32.6%) were under 65.

During 1984/85, a total of 225 new intermediate-care beds were opened in Kelowna, Squamish, Terrace and Prince George. This brings to 4,112 the total number of new beds, in facilities operated by non-profit societies, which have been constructed since the inception of the Long-Term Care Program in 1978.

A number of new group homes were opened during the year in the Vancouver area. The establishment of these new homes increased the number of young physically-disabled adults who are able to achieve a degree of independence in a home-like environment.

TABLE 18

Continuing Care Division

Composition of Long-Term Care Program population by age group 1983/84 and 1984/85

	*Homemaker Clients				**Facility Clients			
	1983/84		1984/85		1983/84		1984/85	
	No.	%	No.	%	No.	%	No.	%
Under 55	1,665	5.8	1,773	5.8	1,283	7.0	1,282	6.9
55-59	880	3.0	848	2.8	476	2.6	444	2.4
60-64	1,658	5.7	1,698	5.6	677	3.7	666	3.6
65-69	2,941	10.2	3,012	9.9	1,013	5.5	982	5.3
70-74	4,716	16.3	4,933	16.2	1,576	8.6	1,621	8.7
75-79	5,959	20.6	6,303	20.7	2,415	13.1	2,527	13.7
80-84	5,715	19.8	6,146	20.2	3,650	19.9	3,731	20.1
85+	5,412	18.6	5,681	18.7	7,293	39.6	7,310	39.4
Total	28,946	100	30,394	100	18,383	100	18,566	100

* Includes persons approved for service.
** Does not include extended-care clients in extended-care units in public hospitals.

TABLE 19

Home Nursing Care Program

Total number of patients by age group and number of days on the program, 1983/84

Days on Program	Age Groups							
	Under 1	1-19	20-44	45-64	65-74	75-84	85+	Total
*carried-over	24	155	481	1,289	1,755	2,148	1,017	6,869
1-5 days	740	617	4,202	2,562	2,116	1,984	648	12,779
6-10 days	223	419	1,887	2,056	1,889	1,584	470	8,528
11-15 days	49	201	789	1,036	1,025	863	326	4,289
16-20 days	13	123	435	633	690	577	235	2,706
21-30 days	10	120	549	869	1,024	990	378	3,939
31-60 days	18	112	568	1,198	1,405	1,422	590	5,313
61-90 days	5	38	192	446	604	708	276	2,289
91-180 days	5	32	189	520	831	890	378	2,845
181-999 days	8	45	159	498	894	1,126	584	3,314
TOTALS								
Patients	1,095	1,862	9,451	11,126	12,233	12,202	4,902	52,871
Age Group Percentage	2.1	3.5	17.9	21.0	23.1	23.1	9.3	100

* Patients not discharged at end of reporting year.
55.5% of the total number of patients are 65 years of age or over.
55.6% (discounting carry-overs) of all patients are on the program 15 days or less.

TABLE 20

Home Nursing Care Program

Percentage, distribution and number of patients in descending order by diagnostic groups, 1983/84

Primary Diagnosis	Number of Patients	Percentage of Total Patients
Circulatory system	8,629	16.3
Neoplasms — malignant	7,355	13.9
Digestive system	5,754	10.9
Accidents	4,550	8.6
Endocrine	3,660	6.9
Skin and subcutaneous tissue	3,477	6.6
Nervous systems/senses	3,382	6.6
Musculoskeletal system	2,705	5.1
Childbirth	2,602	4.9
Respiratory system	2,297	4.3
Gynecology	1,734	3.3
Undiagnosed symptoms and Ill-defined	1,557	2.9
Genitourinary system	1,276	2.4
Perinatal morbidity	951	1.8
Blood diseases	868	1.6
Neoplasms — non-malignant	753	1.4
Mental disorders	678	1.3
Congenital anomalies	316	0.6
Infective and parasitic	315	0.6
Other reasons	12	—
Total	52,871	100.0

TABLE 21

Provincial Home Nursing Care Program 1984/85 statistics

(1) Number of admissions to the program: 42,417

(2) Number of admissions by age group:

Age Group	Admissions	Percentage
Under 1 year	441	1.0
1-19	1,410	3.0
20-44	6,618	16.0
45-64	8,912	21.0
65-74	9,861	23.0
75-84	10,616	25.0
85 +	4,559	11.0
		100.0

(3) Number of admissions by hospital referral: 20,761 or 50% of caseload.

(4) Total number of nursing visits: 640,053

(5) Total number of direct service hours: 637,417

TABLE 22

Home Nursing Care Program

Percentage, distribution, and number of patients by diagnostic groups in descending order, 1984/85

Diagnosis	Number of Patients	Percentage of Total Patients
Circulatory	6,834	16.1
Neoplasm — malignant	5,842	13.8
Gastrointestinal	4,317	10.2
Accidents	3,951	9.3
Endocrine	3,345	7.9
Skin	2,715	6.4
Musculoskeletal	2,391	5.6
Respiratory	2,080	4.9
Sense organs	1,610	3.8
Childbirth	1,543	3.6
Nervous system	1,420	3.3
Undiagnosed symptoms	1,287	3.0
Genitourinary	1,162	2.7
Gynecology	1,056	2.5
Blood	768	1.8
Mental disorders	645	1.5
Neoplasm — non-malignant	530	1.2
Perinatal	350	0.8
Infective	317	0.7
Congenital	227	0.5
Diagnosis not available	27	0.1
Total	42,417	100.0

TABLE 23

Continuing Care Division

Comparison of care levels by residential and home support services, 1984/85

Care Level	Residential	Home Support	Total
Personal Care	18% (3,327)	82% (14,703)	100% (18,030)
Intermediate Care	54% (14,055)	46% (11,865)	100% (25,920)
Extended Care	86% (7,604)	14% (1,136)	100% (8,840)
Totals	47% (24,986)	53% (27,704)	100% (52,790)

* These figures include extended-care clients in extended-care units in public hospitals.

TABLE 24

Continuing Care clients

Facility care

	Sept. 1980	Sept. 1981	Sept. 1982	1983/84	1984/85
Personal Care	5,757	4,573	4,186	3,708	3,327
Intermediate Care I	4,218	4,734	5,271	5,594	5,762
Intermediate Care II	3,047	3,485	3,983	4,309	4,509
Intermediate Care III	2,423	2,739	3,081	3,422	3,765
Extended Care*	1,012	1,039	1,105	1,172	1,184
Total	15,757	16,570	17,626	18,205	18,566

* Does not include extended-care clients in extended-care units in public hospitals.

TABLE 25

Continuing Care clients

Homemaker services

	Sept. 1980	Sept. 1981	Sept. 1982	1983/84	1984/85
Personal Care	14,231	15,394	15,207	15,395	15,999
Intermediate Care I	5,034	5,924	6,933	7,848	8,876
Intermediate Care II	2,843	2,997	3,074	3,161	3,347
Intermediate Care III	1,081	1,151	989	989	924
Extended Care	1,132	1,107	1,110	1,115	1,248
Total	24,322	26,573	27,313	28,508	30,394

Figures refer to clients approved for service; this may be 10-15% higher than figures for clients actually receiving service.

TABLE 26

Continuing Care client assessments

	Total Number of New Assessments	Total Number of Reassessments and Reviews
1980/81	18,559	42,991
1981/82	13,809	54,300
1982/83	14,300	57,000
1983/84	13,486	62,446
1984/85	12,964*	63,175*

* Projected.

Hospital Programs Division

Hospital Programs Division is responsible for overseeing the operation of acute-care, rehabilitation and extended-care hospitals in British Columbia. The role of this Division is essentially that of a funding agency, with practical responsibility for facility operations remaining with the institutions. Although ultimate responsibility rests with the Minister of Health, an "arms-length" relationship is maintained with the facilities. Hospital Programs' mandate is to ensure that the Provincial Government receives "value" for the funds expended and that the hospitals' output justifies the funding allocated to them.

In addition, the Division monitors the quality of care; develops long-range capital plans; monitors, reviews, and adjusts facility funding allocations; and provides an investigative service with regard to specific concerns about the delivery system itself. Hospital Programs works closely with hospital facilities to encourage the introduction of innovative management and staffing techniques, particularly those associated with multi-unit management and cost-shared services and equipment.

Provincial funding for the operation of acute-care and extended-care hospitals is provided pursuant to the *Hospital Insurance Act*. The total allocation of operating grants covers 81% of expenditures. The balance of hospitals' gross expenditures are covered by other income sources, including co-insurance charges to patients, and income from other agencies such as the Workers' Compensation Board and Medical Services Plan. No operating funds are requisitioned from local municipalities, although hospitals do receive donations from the public, which may be used at their discretion.

Since 1982, Ministry funding has been allocated on a global basis, whereby hospitals do not receive adjustments for either deficits or surpluses. Quarterly reviews of each facility's performance are conducted, however, and adjustments to funding are made on a prospective basis to recognize workload changes and the hospital's efficiency, length of stay by patients, and other factors affecting the cost per weighted-patient-day in comparison to peer group hospitals.

Funding for hospital equipment is designated under the *Hospital Insurance Act* and *Regulations*, and administered and priorized through the Equipment Grants Secretariat of Hospital Programs. Hospitals are allocated blocked amounts twice annually to cover acquisitions of items costing $10,000 or less (items costing $500 or less are funded by hospitals from their operating funds). Equipment grants are paid as follows: 75% of total cost for imaging and laboratory diagnostic equipment; 33⅓% of total cost for other equipment; and 100% of total cost for designated provincial referral services.

Capital funding is grouped into four basic categories:

(a) Major projects: normally refers to projects with a value of $1 million or more; funding is shared 60% by the Province and 40% by the Regional Hospital District.

(b) Treasury Board minor projects: costing between $100,000 and $1 million; funding is shared 60% by the Province and 40% by the Regional Hospital District.

(c) Minor capital projects: costing between $1,000 and $100,000; funds are provided 60% by the Province and 40% by the hospital.

(d) Energy conservation projects: Hospital Programs funds a 100% grant program for energy conservation projects (from $500 to $75,000) that meet a three-year pay-back criterion.

A total of $96,501,000 was expended in 1983/84 and $136,956,000 in 1984/85 for planning and construction projects.

Hospital Programs is made up of a number of Branches: Medical Consultation, Administrative and Support Services, Planning and Construction, and five Regional Teams. The teams are responsible for providing the necessary Ministry contact with hospital boards and administration, ensuring adherence to quality of care and safety standards, and performing quarterly monitoring of hospital operations and financial allocations. This includes the investigation of anomalies and recommendations for their resolution, as well as recommendations for operat-

ing costs, capital costs, capital construction, and equipment purchases. Interactive relationships with the following groups are thus ensured:

(a) Hospital Boards: Hospitals are owned and operated by self-governing, autonomous societies or corporations, and their boards of management are responsible for the policies for day-to-day operations and for planning with the Ministry to establish the role of their facilities.

(b) Administrators: The majority of hospitals operate with an administrator responsible for the day-to-day operations of one or more facilities. These facilities may offer different levels of service.

(c) B.C. Health Association: This association is a voluntary agency of hospital trustees and administrators. Hospital Programs maintains an active role in several functions with the BCHA, most notably the Economics, Patient Care, and Computer Committees. Major policy changes being considered by the Ministry are normally discussed with the BCHA prior to implementation.

(d) B.C. Medical Association: The Ministry works closely and co-operatively with the BCMA through Continuing Advisory Subcommittees (CASC), Temporary Advisory Subcommittees (TASC), and Special Committees. These committees have a mandate to assess the types and appropriateness of specific services, as well as to make recommendations on provincial objectives and policies.

(e) University of B.C. Medical Faculty: A close, informal working relationship is maintained on a number of general issues. Formal co-ordination includes joint provincial committees on Interns and Residents, and on Medical Manpower.

(f) Medical Appeal Board: The Ministry maintains an active, supportive relationship with this board, which consists of representatives from the College of Physicians and Surgeons, BCMA, BCHA, College of Dental Surgeons, plus four appointees of the Minister of Health.

(g) Other: Hospital Programs also maintains an active relationship with the following groups, which receive funding separately from that allocated to hospitals: Canadian Red Cross; Health Labour Relations Association; the Arthritis Society; B.C. Drug and Poison Information Centre; and the B.C. Hospitals Shared Systems Society. In addition, Hospital Programs has been instrumental in national and provincial planning for the establishment of transplant centres and the operational guidelines for organ transplant services.

In addition to these relatively formal interface mechanisms, Hospital Programs has taken an active informal role to further encourage co-operation between the Ministry and the field. These initiatives include: Hospital Programs educational seminar series (open to hospital staff); major seminar presentations to BCHA, B.C.Institute of Chartered Accountants, Union of B.C. Municipalities (Regional Hospital Districts); site visits by the regional teams; and travelling presentations to explain financial policies and procedures.

Institutional Services Management Engineering Unit

During 1984/85, the Management Engineering Unit worked on 35 projects, covering many functional areas of the Ministry. These projects can be classified into operational (where work systems are critically analyzed and recommendations are made for improvement), and informational (where data on work systems is provided to assist management decision-making).

Major projects included an analysis of the workload of case managers in Long-Term Care, the development and testing of a costing methodology for laboratory tests, and the development of a workload measurement system for Home Nursing Care. The unit has provided specialist input into the ergonomic evaluation of several aspects of work-station design in the Headquarters building, and has been the prime source of technical consulting for the National Hospital Productivity Improvement Program.

TABLE 27

Hospital Programs

Hospital construction projects completed, 1983/84

Hospital	Project	Cost
		$
Barriere	New Diagnostic and Treatment Centre	763,000
Chilliwack	Electrical substation	660,000
Creston	Extended-care addition (20 beds)	927,000
Grand Forks	Extended-care addition (20 beds)	1,687,000
Houston	New Diagnostic and Treatment Centre	820,000
Nelson	Fire upgrading program	973,000
Penticton	Acute-care expansion (38 beds)	2,676,000
Saanichton	Extended-care addition (50 beds)	4,371,000
Tumbler Ridge	New Diagnostic and Treatment Centre	1,601,000
Vancouver General	Parking facility	11,672,000
	Eye Care Centre	1,477,000
	Adolescent Psychiatric Unit	248,000
St. Paul's	Phase 1 (261 beds)	40,489,000
Victoria General	New hospital, Phase 3	24,837,000
	Fairfield renovation	3,300,000
Total		96,501,000

TABLE 28

Hospital Programs

Hospital construction projects completed, 1984/85

Hospital	Project	Cost
		$
Clearwater	Services expansion	432,000
Duncan	Psychiatric Unit renovations (12 beds)	926,000
Logan Lake	New Diagnostic and Treatment Centre	544,000
Maple Ridge	Extended-care addition (50 beds)	3,273,000
Lions Gate, North Vancouver	Extended-care expansion (125 beds)	7,606,000
Port Moody	New acute-care hospital (25 beds)	40,085,000
Richmond	Annex renovations, Phase 2 (175 extended-care beds)	189,000
Squamish	E.C.U., plus intermediate-care beds	617,000
Summerland	E.C.U. (50 beds)/laboratory expansion	3,074,000
Surrey	Acute-care expansion, Phase 2, Stage 1	1,964,000
Vancouver General	Power plant upgrading	4,696,000
	Interim moves	3,000,000
Evans Clinic/C.C.A.B.C., Vancouver	Expansion, Phase 3 (100 Acute Beds)	32,704,000
Vernon	Acute-care/services addition (73 beds)	27,256,000
White Rock	Expansion, Phase 1 (44 temporary E.C. beds)	2,759,000
Cottonwoods, Kelowna	E.C.U. (50 beds in-shell, 25 special extended-care beds)	7,000,000
Queen Alexandra, Victoria	Upgrading	831,000
Total		136,956,000

TABLE 29

Hospital patient separations according to responsibility for coverage and type of health care

	1980/81	1981/82	1982/83	1983/84[1]	1984/85[2]
A. SEPARATIONS					
(1) B.C. Public Hospitals (total)					
Acute/Rehab.	409,216	435,519	411,640	419,432	435,463
Long Terr.	[4]	3,893	3,243	2,936	3,276
Extended	3,680	3,463	3,779	4,305	5,009
Newborn	41,514	43,873	44,402	45,584	46,988
(2) Covered by Hospital Programs (included above)					
Acute/Rehab.	389,573	415,050	397,644	406,010	421,528
Long Term	[4]	3,881	3,240	2,930	3,266
Extended	3,680	3,442	3,760	4,279	4,984
Newborn	40,767	43,215	43,514	42,731	46,095
(3) Percentage of total covered by Hospital Programs					
Acute/Rehab.	95.2	95.3	96.6	96.8	96.8
Long Term	[4]	99.7	99.9	99.8	99.7
Extended[3]	100.00	99.4	99.5	99.4	99.5
Newborn	98.2	98.5	98.0	98.2	98.1
(4) Other hospitals — Hospital Programs responsibility (Federal/contract hospitals)					
Acute/Rehab.	519	545	466	401	388
Newborn	59	38	43	41	12
(5) Out-of-Province — Hospital Programs responsibility					
Acute/Rehab.	6,661	7,174	8,840	7,514	8,482
Newborn	298	320	281	256	302

[1] Amended as per final HIA35 report from hospitals.

[2] Estimated based on projected HIA35 hospital reports.

[3] For 1980/81 the proportion of Hospital Programs separations to total separations was not determined. It is assumed therefore to be 100%.

[4] Included in Acute/Rehab.

TABLE 30

Hospital patient days and utilization statistics according to responsibility for coverage and type of care

	1980/81	1981/82	1982/83	1983/84[1]	1984/85[2]
B. PATIENT DAYS					
(1) B.C. Public Hospitals					
Acute/Rehab.	3,648,247	3,422,235	3,197,456	3,214,120	3,250,696
Long Term	[4]	308,202	227,366	199,344	192,093
Extended	1,963,022	2,024,716	2,091,632	2,246,063	2,416,860
Newborn	234,094	241,613	223,545	231,229	230,169
(2) Covered by Hospital Programs					
Acute/Rehab.	3,505,965	3,297,236	3,087,312	3,111,124	3,148,027
Long Term	[4]	307,238	227,101	199,016	191,603
Extended	1,963,022	2,012,375	2,081,758	2,233,144	2,404,678
Newborn	228,476	236,084	219,163	227,101	225,737
(3) Percentage of total covered by Hospital Programs					
Acute/Rehab.	96.1	96.3	96.6	96.8	96.8
Long Term	[4]	99.7	99.9	99.8	99.7
Extended	100.0	99.4	99.5	99.4	99.5
Newborn	97.6	97.7	98.0	98.2	98.1
(4) Other hospitals					
Federal/contract hospitals					
Acute/Rehab.	1,795	1,563	1,775	1,562	1,289
Newborn	279	166	175	150	48
Out-of-Province					
Acute/Rehab.	50,631	51,270	64,551	63,438	67,224
Newborn	1,984	2,020	1,575	1,408	1,560
(5) Average days stay (Hospital Programs patients — B.C. public hospitals)					
Acute/Rehab/LTC	9.00	8.60	8.27	8.09	7.86
Extended Care	533.43	584.65	553.67	521.88	482.48
Newborn	5.60	5.46	5.03	5.31	4.90
(6) Average days stay (Hospital Programs patients — Federal/contract hospitals)					
Acute/Rehab.	3.46	2.87	3.81	3.90	3.32
Newborn	4.73	4.37	4.07	3.66	4.00
(7) Average days stay (Hospital Programs patients — Out-of-Province)					
Acute/Rehab.	7.60	7.15	7.30	8.44	7.93
Newborn	6.66	6.31	5.60	5.50	5.17

[1] Amended as per final HIA35 report from hospitals.

[2] Estimated based on projected HIA35 hospital reports.

[3] Estimated patient days (including newborn) per 1,000 population covered by Hospital Programs: 1980/81 — 1,350; 1981/82 — 1,419; 1982/83 — 1,299; 1983/84 — 1,257; 1984/85 — 1,249 (Because the armed forces, Royal Canadian Mounted Police, and some other groups are not insured under the Provincial Plan, the actual incidence of days would be somewhat higher than shown). In addition, estimated patient days per 1,000 population for extended care amounted to 720 in 1980/81, 733 in 1981/82, 747 in 1982/83, 779 in 1983/84 and 826 in 1984/85. Population according to latest census figures.

[4] Included in Acute/Rehab.

TABLE 31

Hospital Programs patient separations from B.C. hospitals and average length of stay (grouped according to bed capacity) 1984/85[1]

	Total	250 beds and over	100 to 249	50 to 99	25 to 49	Under 25
Patient separations						
Acute/Rehab./LTC in Acute	424,794	213,052	118,749	54,554	25,989	12,450
Extended	4,984	1,955	1,372	439	281	937
Newborn	46,095	17,644	18,726	6,160	2,471	1,094
Patient days						
Acute/Rehab./LTC in Acute	3,339,630	1,779,466	946,783	365,181	187,522	60,678
Extended	2,404,678	768,907	640,789	256,949	139,288	598,745
Newborn	225,737	89,991	93,936	27,888	9,883	4,039
Average length of stay (in days)						
Acute/Rehab./LTC in Acute	7.86	8.35	7.97	6.69	7.22	4.87
Extended	482.48	393.30	467.05	585.31	495.69	639.00
Newborn	4.90	5.10	5.02	4.53	4.00	3.69

[1] Estimated based on projected HIA35 hospital reports.

TABLE 32

Percentage distribution of Hospital Programs patient separations and patient days (grouped according to bed capacity) 1984/85[1]

	250 beds and over	100 to 249	50 to 99	25 to 49	Under 25
Patient separations	%				
Acute/Rehab./LTC in Acute	50.15	27.96	12.84	6.12	2.93
Extended	39.22	27.53	8.81	5.64	18.80
Newborn	38.28	40.63	13.36	5.36	2.37
Patient days					
Acute/Rehab./LTC in Acute	53.28	28.35	10.93	5.62	1.82
Extended	31.98	26.65	10.68	5.79	24.90
Newborn	39.87	41.61	12.35	4.38	1.79

[1] Estimated based on projected HIA35 hospital reports.

TABLE 33

Summary of Hospital Programs outpatient treatments by category 1980/81 — 1984/85

	1980/81	1981/82	1982/83	1983/84[1]	1984/85[2]
Psychiatry					
Outpatient	29,972	34,658	42,009	48,300	47,952
Day Care	63,529	70,266	66,475	65,328	65,509
Minor and emergency	1,019,628	1,001,814	1,172,857	1,143,069	1,136,870
Day care surgery	93,445	102,621	108,513	118,472	129,794
Diabetic day care	6,595	7,912	10,463	12,684	14,281
Physiotherapy	507,233	552,236	713,157	757,844	752,781
Dietetic counselling	23,649	24,346	48,795	71,656	95,141
Renal dialysis day care	22,177	23,380	24,440	27,883	37,814
Other[3]	165,320	165,970	264,127	237,227	242,202
Totals	1,931,548	1,983,203	2,450,836	2,482,463	2,522,344

[1] Amended as per final report received from hospitals.
[2] Estimated based on projected HIA35 hospital reports.
[3] Other includes (a) Cancer outpatients
(b) Rehabilitation, other day care programs
(c) Outpatient treatment provided to Hospital Programs beneficiaries in other provinces (data unavailable for 1980/81 and 1981/82).

TABLE 34

Summary of Hospital Programs inpatients and outpatients 1980/81 — 1984/85

	Total adults, children and newborn inpatients	Estimated number of emergency, minor, daycare and out-patient services	Total receiving benefits
1980/81	441,557	1,931,548	2,373,105
1981/82	473,665	1,983,203	2,456,868
1982/83	457,788	2,450,836	2,908,624
1983/84[1]	464,162	2,482,436	2,946,598
1984/85[2]	485,057	2,522,344	3,007,401

[1] Amended as per final report received from hospital.
[2] Estimated based on projected HIA35 hospital reports.

Ministry of Health Expenditures

TABLE 35

Ministry of Health
Expenditure by principal programs
For the fiscal years 1984/85 and 1983/84

	1984/85 $	1983/84 $
Statutory		
Veteran's Hospital Agreement (*Financial Administration Act*)	78,962	—
Minister's Office	181,470	160,696
Management Operations		
Central Administration	10,840,916	8,799,936
Support Services	48,826,359	48,991,742
Special Care Services Grant	4,920,991	5,362,357
	64,848,698	63,314,731
Preventive and Community Health Care Services		
Preventive Services	44,011,755	36,697,616
Vancouver Bureau	15,671,457	12,687,845
Vital Statistics	2,505,638	2,197,131
Forensic Psychiatric Services	14,797,321	12,110,880
Alcohol and Drug Programs	18,688,077	17,003,706
Mental Health Services	88,517,644	65,279,464
	184,191,892	145,976,642
Institutional Services		
Hospital Programs	1,384,775,296	1,330,319,166
Long-Term Care	310,308,347	319,865,132
Emergency Health Services	50,907,616	46,885,771
	1,745,991,259	1,697,070,069
Medical Services Commission	891,367,796[1]	863,325,715[2]
	2,886,399,645	2,769,687,157

[1] The expenditure of $891,367,796 shown for Medical Services Commission is the gross operating cost as shown in the detailed statements of the Public Accounts. The actual charge to Vote 36 was $562,554,189 and covered the subsidy by the province for low-income residents and the estimated deficits not covered by premiums and other revenue.

[2] The expenditure of $863,325,715 shown for Medical Services Commission is the gross operating cost as shown in the detailed statements of the Public Accounts. The actual charge to Vote 46 was $528,919,057 and covered the subsidy by the province for low-income residents and the estimated deficits not covered by premiums and other revenue.

Exhibit A

Medical Services Commission of British Columbia
Statement of financial position
as at March 31, 1985

	1985	1984
	$	$
Assets		
Cash	5,107,056	5,774,087
Accounts receivable	1,827,826	1,666,579
Due from the Province of British Columbia	146,207,826	132,415,598
	153,142,708	139,856,264
Liabilities		
Accounts payable	3,407,187	2,520,198
Premiums received in advance	47,436,787	39,070,166
Estimated liability for unpresented and unprocessed benefit claims	102,298,734	98,265,900
	153,142,708	139,856,264

The accompanying notes are an integral part of these financial statements.

Approved by the Commission:
Dr. D.M. Bolton, *Chairman*.

AUDITOR'S REPORT

To the Chairman of the
Medical Services Commission of British Columbia, and
To the Minister of Health
Province of British Columbia

I have examined the statement of financial position of the Medical Services Commission of British Columbia as at 31 March 1985 and the statement of operations for the year then ended. My examination was made in accordance with generally accepted auditing standards, and accordingly included such tests and other procedures as I considered necessary in the circumstances.

In my opinion, these financial statements present fairly the financial position of the Commission as at 31 March 1985 and the results of its operations for the year then ended in accordance with the accounting policies described in Note 1, applied on a basis consistent with that of the preceding year.

ERMA MORRISON, F.C.A.
Auditor General

Victoria, British Columbia
14 June 1985

Exhibit B

Medical Services Commission of British Columbia
Statement of operations
for the year ended March 31, 1985

	1985	1984
	$	$
Revenue		
Subscribers' premiums	328,813,607	315,250,682
Premium assistance — Province of British Columbia	79,267,934	67,647,063
	408,081,541	382,897,745
Expenditure		
Benefits		
Medical care	812,931,834	793,763,950
Supplementary benefits	53,057,847	48,927,947
	865,989,681	842,691,897
Administration		
Data processing	9,516,971	7,818,719
General office	2,862,151	2,067,606
Salaries	12,998,993	10,747,493
	25,378,115	20,633,818
	891,367,796	863,325,715
Excess of operating expenditure over revenue	(483,286,255)	(480,427,970)
Contributions from the Province of British Columbia	483,286,255	480,427,970
	—	—
Working capital deficiency at beginning of year	—	(120,126,050)
Additional contribution from the Province of British Columbia (note 3)	—	120,126,050
	—	—

Medical Services Commission of British Columbia

Notes to Financial Statements for the year ended March 31, 1985

1. Significant accounting policies

These financial statements have been prepared in accordance with generally accepted accounting principles except that:

(i) Premiums from individual subscribers are included as revenue only when cash is received and the revenue is earned. Premiums from other sources are recognized as revenue on an accrual basis.

(ii) The cost of furniture and equipment is charged to administration expenses in the year of acquisition.

(iii) Employees' holiday pay is not accrued.

2. Relationship with the Province of British Columbia

The Commission was appointed by the Province of British Columbia and is responsible for the administration of the *Medical Service Act*.

The Province absorbs certain costs that would be charged to the Commission; for example, occupancy costs.

3. Additional Contribution from the Province of British Columbia

In 1984 the Province of British Columbia made an additional contribution of $120,126,050 to absorb the Commission's working capital deficiency at the beginning of that fiscal year.